A

VOYAGE

TO THE

ACIFIC OCEAN;

Undertaken by the Command of His Majesty,

MAKING DISCOVERIES IN THE NORTHERN HEMISPHERE.

PERFORMED UNDER THE DIRECTION

PTAINS COOK, CLERKE, & GORE,

In the years 1776, 7, 8, 9, and 80.

npiled from the various Accounts of that Voyage hitherto Published.

IN FOUR VOLUMES.

VOL. IV.

EDINBURGH:

PRINTED BY ALEX. LAWRIE AND CO.

FOR J. FAIRBAIRN, ADAMS'S SQUA

1805.

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TO THE

PACIFIC OCEAN.

BOOK VI.

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THE next morning, at four o'clock, we got under way with the tide of ebb, and, as there was a perfect calm, the boats were dispatched a-head for the purpose of towing the ships. About ten, a south-easterly wind springing up, and the tide having turned, we were obliged to let go

our anchors again, in seven fathoms, the *ostrog* bearing north half east, at the distance of a mile from the land that was nearest to us, and the three needle rocks being in the direction of south half east.

Captain Gore and Lieutenant King landed, in the afternoon, on the east side of the passage, where they observed, in two different places, the remains of spacious villages; and, on the side of a hill, they saw an old ruined parapet, with four or five embrasures. It had guns mounted on it in Beering's time, as that navigator himself informs us, and commanded the passage up the mouth of the bay. Not far from this spot were the ruins of some subterraneous caverns, which our two gentlemen conjectured to have been magazines.

We weighed anchor, with the ebb tide, about six o'clock in the afternoon, and turned to windward; but, two hours after, a thick fog coming on, we were under the necessity of bringing to, our soundings not affording us a sufficient direction for steering betwixt several sunken rocks, situate on each side of the passage we were to make. The next morning, (Monday the 14th) the fog in some degree dispersing, we weighed as soon as the tide began to ebb, and, there being little wind, the boats were sent a-head to tow; but, about ten o'clock, both the wind and tide set in so strong from the sea, that we were once more obliged to cast anchor, in thirteen fathoms water, the high rock being at the distance of six furlongs, in the direction of west one quarter south. We continued, during the remainder of the day, in this situation, the wind blowing fresh into the mouth of the bay.

Towards the evening the weather was extremely dark and cloudy, with an unsettled wind.

We were surprised, before day-light, on the 15th, with a rumbling noise, that resembled distant thunder; and, when the day appeared, we found that the sides and decks of our ships were covered, near an inch thick, with a fine dust like emery. The air was at the same time loaded and obscured with this substance; and, towards the volcano mountain, which stands to the northward of the harbour, it was exceedingly thick and black, insomuch that we were unable to distinguish the body of the hill. About twelve o'clock, and during the afternoon, the loudness of the explosions increased; and they were succeeded by showers of cinders, which, in general, were of the size of peas, though many of those that were picked up from the deck were larger than a hazel nut. Several small stones, which had undergone no alteration from the action of fire, fell with the cinders. In the evening we had dreadful claps of thunder, and vivid flashes of lightning, which, with the darkness of the sky, and the sulphurous smell of the air, produced a very awful and tremendous effect. Our distance from the foot of the mountain was, at this time, about eight leagues.

At day-break, on the 6th, we got up our anchors, and stood out of the bay; but the wind falling, and the ebb tide setting across the passage on the eastern shore, we were driven very near the three needle rocks, situate on that side of the entrance, and were under the necessity of hoisting out the boats for the purpose of towing the ships clear of them. At twelve o'clock we were at the dis-

tance of six miles from the land, and our depth of water was forty-three fathoms, over a bottom of small stones, of the same kind with those which had fallen upon our decks after the late eruption of the volcano.

The country had now a very different appearance from what it had on our first arrival. The snow, except what remained on the summits of some very lofty mountains, had vanished; and the sides of the hills, which abounded with wood in many parts, were covered with a beautiful verdure.

It being the intention of captain Clerke to keep in sight of the coast of Kamtschatka, as much as the weather would allow, in order to ascertain its position, we continued to steer towards the north-northeast, with variable light winds, till the 18th. The volcano was still observed to throw up immense columns of smoke; and we did not strike ground with one hundred and fifty fathoms of line at the distance of twelve miles from the shore.

The wind blew fresh from the south on the 18th, and the weather became so thick and hazy that it was imprudent to make any further attempts at present to keep in sight of the land. However, that we might be ready, whenever the fog should clear up, to resume our survey, we ran on in the direction of the coast, (as represented in the Russian charts) and fired signal guns for the Discovery to proceed on the same course. At eleven o'clock, just before we lost sight of land, Cheepoonskoi Noss, so denominated by the Russians, was at the distance of seven or eight leagues, bearing north-northeast.

At three o'clock, in the morning of the 20th, the weather becoming clearer, we stood in towards the land; and, in the space of an hour afterwards, saw it a-head, extending from northwest to north-northeast at the distance of about five leagues. The northern part we conjectured to be Kronotskoi Noss, its position, in the Russian charts, nearly agreeing with our reckoning in respect to its latitude, which was 54° 42′ north, though, in point of longitude, we differed considerably from them; for they place it 1° 48′ east of Awatska, whereas our computation makes it 3° 34′ east of that place, or 162° 17′ east of Greenwich. The land about this cape is very elevated, and the inland mountains were at this time covered with snow. There is no appearance of inlets or bays in the coast, and the shore breaks off in steep cliffs.

We had not long been gratified with this view of the land when the wind freshened from the southwest, bringing on a thick fog, which obliged us to stand off in the direction of northeast by east. The fog dispersing about noon, we again steered for the land, expecting to fall in with Kamtschatkoi Noss, and gained a sight of it at day-break on the 21st. The southwest wind being soon after succeeded by a light breeze that blew off the land, we were prevented from approaching the coast sufficently near to determine its direction, or describe its aspect. At twelve o'clock our longitude was 163° 50′, and our latitude 55° 52′; the extremes of the land bore northwest by west ¾ west, and north by west ¾ west; and the nearest part was at the distance of about twenty-four miles.

At nine in the evening, when we had approached about six miles nearer the coast, it appeared to form a projecting peninsula, and to extend eleven or twelve leagues in the direction nearly of north and south. It is level, and of a moderate elevation; the southern extreme terminates in a sloping point; that to the northward forms a steep bluff head; and between them, ten or twelve miles to the south of the northern cape, there is a considerable break in the land. On both sides of this break the land is low. A remarkable hill, resembling a saddle, rises beyond the opening; and a chain of lofty mountains, capped with snow, extends along the back of the whole peninsula.

The coast running in an even direction, we were uncertain with respect to the position of Kamtschatskoi Noss, which, according to Mr Muller, forms a projecting point towards the middle of the peninsula; but we afterwards found, that, in a late Russian map, that appellation is given to the southern cape. The latitude of this, from several accurate observations, was 56° 3′, and its longitude [illegible] 20′. To the south of this peninsula the great river Kamtschatka runs into the sea.

The season being two far advanced for us to make an accurate survey of the coast of Kamtschatka, it was the design of captain Clerke, in our course to Beering's Streights, to ascertain chiefly the respective situations of the projecting points of the coast. We therefore steered across a spacious bay, and ran down between Kamtschatskoi Noss and [illegible] Noss, with a view of making the latter, which is represented by the Russian geographers as terminating the peninsula of Kamtschatka,

and as being the southern limit of the country of the Koriacs.

On Tuesday the 22d we passed a dead whale, which emitted a most horrible smell, perceivable at the distance of three or four miles. It was covered with a very considerable number of gulls, petrels, and other oceanic birds, which were regaling themselves upon it. On the 24th, the wind, which had shifted about during the three preceding days, settled at southwest, bringing on clear weather, with which we proceeded towards the northeast by north, across the bay, having no land in sight. In the course of this day we observed a great number of gulls, and were disgusted with the indelicate manner of feeding of the arctic gull, which has procured it the appellation of the parasite. This bird, which is rather larger than the common gull, pursues the latter species whenever it meets them; the gull, after flying about for some time, with loud screams, and manifest indications of extreme terror, drops its excrement, which its pursuer instantly darts at, and catches in its beak before it falls into the sea.

At one o'clock in the afternoon of the 25th, when we were in the latitude of 59° 12′, and in the longitude of 168° 35′, a very thick fog came on, about the time we expected to obtain a view of Olutorskoi Noss, which (if Muller's position of it, in the latitude of 59° 30′, and in the longitude of 167° 36′, is right) could then have been only a dozen leagues from us, at which distance we might easily have discerned land of a moderate height. Our depth of water, at present, was so great, that

we had no ground with a hundred and sixty fathoms of line.

The fog still continuing prevented us from making a nearer approach to the land, and we steered east by north at five o'clock, which is a little more easterly than the Russian charts represent the trending of the coast from Olutorskoi Noss. The next day a fresh gale blew from the southwest, which lasted till noon on the 27th, when, the weather clearing up, we steered to the north, with an intention of making the land. Our latitude, at this time, was 59° 49′, and our longitude 175° 43′. Though we saw some shags in the morning, which are imagined never to fly far from land, yet there was no appearance of it during the whole day. However, the next morning, about six o'clock, we had sight of it towards the northwest. The coast appeared in hills of a moderate elevation; but, inland, others were observed considerably higher. The snow lying in patches, and no wood being perceived, the land had a very barren aspect.

At nine o'clock, we were ten or eleven miles from the shore, the southern extreme bearing west by south, about six leagues distant, beyond which the coast seemed to incline to the west. This point being in the longitude of 174° 48′, and in the latitude of 61° 48′, is situate, according to the Russian charts, near the mouth of the river Opuka. The northern extremity, at the same time, bore north by west; between which, and a hill bearing northwest by west $\frac{1}{4}$ west, the coast appeared to bend towards the west, and form a deep bay.

At the distance of about eight miles from the land, we observed a strong rippling; and being under strong apprehensions of meeting with foul ground, we made sail to the northeast, along the coast. On heaving the lead, we found the depth of water to be twenty-four fathoms, over a bottom of gravel. We therefore concluded, that the appearance above mentioned was occasioned by a tide then running to the southward. At noon, the extremes of the land bearing west-southwest, and north-northeast, we were a-breast of the low land, which, we now observed, joined the two points where we had before expected to discover a deep bay. The coast bends a little towards the west, and has a small inlet, which is, perhaps, the mouth of some inconsiderable river. Our longitude was now 175° 43′, and our latitude 61° 56′.

During the afternoon, we continued our course along the coast, at the distance of four or five leagues, with a breeze from the west, having regular soundings from twenty-eight to thirty-six fathoms. The coast exhibited an appearance of sterility, and the hills rose to a considerable elevation inland, but the clouds on their tops prevented us from determining their height. About eight o'clock in the evening, some of our people thought they saw land to the east by north; upon which we stood to the southward of east; but it appeared to be nothing more than a fog bank. At mid-night, the extreme point bearing northeast $\frac{1}{4}$ east, we conjectured that it was St Thadeus's Noss; to the south of which the land inclines towards the west, forming a deep bight, wherein the river Katirka, according to the charts published by the Russians, is situate.

The weather, on the 29th was unsettled, the wind at the northeast point. The next day, at twelve o'clock, our longitude was 180°, and our latitude 61° 48′. At this time St Thadeus's Noss bore north-northwest, at the distance of twenty-three leagues; and beyond it we perceived the coast extending almost directly north. The easternmost point of the Noss is in the latitude of 62° 50′, and in the longitude of 179°. The land about it, from its being discerned at so great a distance, may justly be supposed to be of a considerable height. During this and the preceding day, we saw numbers of sea-horses, whales, and seals; also albatrosses, gulls, sea parrots, guillemots, &c. Taking the advantage of a little calm weather, several of our people employed themselves in fishing, and caught plenty of excellent cod. Our soundings were from sixty-five to seventy-five fathoms.

At noon, on Thursday the 1st of July, Mr Bligh, master of the Resolution, having moored a small keg with the deep sea-lead, in seventy-five fathoms water, found that the ship made a course to the north by east, about half a mile in an hour: this was attributed by him to the effect of a southerly swell, rather than to that of any current. The wind, towards the evening, freshening from the southeast, we steered to the northeast by east, for the point that Beering calls Tschukotskoi Noss, which we had observed on the 4th of September the preceding year, at the same time that we perceived, towards the southeast, the isle of St Lawrence. This cape, and St Thadeus's Noss form the north-eastern and south-western extremes of the extensive Gulph of Anadir, into the bottom of which

the river of that name discharges itself, separating, as it passes, the country of the Tschutski from that of the Koriacs.

On the 3d of July, at twelve o'clock, our latitude was 63° 33′, and our longitude 186° 45′. Between twelve and one, we descried the Tschukotskoi Noss bearing north half west, at the distance of thirteen or fourteen leagues. At five in the afternoon we saw the island of St Lawrence, in the direction of east three quarters north; and also another island, which we imagined was between St Lawrence and Anderson's Island, about eighteen miles east-southeast of the former. As we had no certain knowledge of this island, captain Clerke was inclined to have a nearer view of it, and immediately hauled the wind towards it: but it unfortunately happened, that we were unable to weather the isle of St Lawrence, and we were therefore obliged to bear up again, and pass them all to the leeward.

The latitude of the island of St Lawrence, according to the most accurate observations, is 63° 47′; and its longitude is 188° 15′. This island, if its boundaries were at present within our view, is about three leagues in circumference. The northern part of it may be discerned at the distance of ten or a dozen leagues. As it has some low land to the southeast, the extent of which we could not perceive, some of us supposed that it might perhaps be joined to the land to the eastward of it: we were, however, prevented by the haziness of the weather from ascertaining this circumstance. These islands, as well as the land adjoining to the Tschukotskoi Noss, were covered with snow, and presented a most dismal aspect. About mid-night, the isle of St

Lawrence was five or six miles distant, bearing south-southeast; and our soundings were eighteen fathoms. We were accompanied with sea fowl of various sorts, and observed some guillemots, and small crested hawks.

As the weather continued to thicken, we lost sight of land till Monday the 5th, when we had a view of it both to the northeast and northwest. Our longitude, at this time, was 189° 14′, and our latitude 65° 24′. As the islands of St Diomede, which are situate in Beering's Streight, between the two continents of Asia and America, were determined by us the preceding year to be in the latitude of 65° 48′, we were at a loss how to reconcile the land towards the northeast, with the position of those islands. We therefore stood for the land till three o'clock in the afternoon, when we were within the distance of four miles from it, and discovering it to be the two islands, were pretty well convinced of their being the same; but the haziness of the weather still continuing, we, in order to be certain with respect to our situation, stood over to the Asiatic coast till about seven o'clock in the evening; at which time we had approached within two or three leagues of the eastern cape of that continent.

This cape is an elevated round head of land, and extends about five miles from north to south. It forms a peninsula, which is connected with the continent by a narrow isthmus of low land. It has a bold shore; and three lofty, detached, spiral rocks, are seen off its north part. It was at present covered with snow, and the beach encompassed with ice. We were now convinced of our having been under the influence of a strong current setting to

the northward, which had occasioned an error of twenty miles in our computation of the latitude at noon. At the time of our passing this streight the last year, we had experienced a similar effect.

Being now certain with regard to our position, we steered north by east. At ten o'clock in the evening, the weather clearing up, we saw, at the same instant, the remarkable peaked hill near Cape Prince of Wales, on the North American coast, and the East Cape of Asia, with the two islands of St Diomede between them

In the course of this day, we saw several large white gulls, and great numbers of very small birds of the hawk kind. The beak of the latter was compressed, and large in proportion to the body of the bird; the colour was dark brown, or rather black, the breast whitish, and towards the abdomen a reddish brown hue was visible.

On the 6th, at twelve o'clock, our latitude was 67°, and our longitude 191° 6′. Having already passed many large masses of ice, and observed that it adhered, in several places, to the shore of the Asiatic continent, we were not greatly surprised when we fell in, about three o'clock, with an extensive body of it, stretching towards the west. This appearance considerably discouraged our hopes of proceeding much further to the north this year than we had done the preceding. There being little wind in the afternoon, the boats were hoisted out in pursuit of the sea-horses, great numbers of which were seen on the detached pieces of ice; but they returned without success: these animals being extremely shy, and, before our people could come within gunshot of them, always retreated into the water.

Having hoisted in the boats at seven o'clock in the evening, we stood on to the north-eastward, with a fresh southerly breeze, intending to explore the American continent, between the latitudes of 68° and 69°, which, on account of the foggy weather, we had not an opportunity of examining last year. In this attempt we were partly dissappointed again: for, on the 7th, about six o'clock in the morning, we were stopped by a large body of ice, stretching from northwest to southeast; but, not long afterwards, the horizon becoming clear, we had a view of the American coast, at the distance of about ten leagues, extending from northeast by east to east, and lying between 68° and 68° 20′ of northern latitude. The ice not being high, we were enabled by the clearness of the weather to see over a great extent of it. The whole exhibited a compact solid surface, not in the least thawed; and seemed also to adhere to the land.

The weather becoming hazy soon after, we lost sight of the land; and it being impossible to approach nearer to it, we steered to the north-northwest, keeping the ice close on board; and having, by noon, got round its western extremity, we found that it trended nearly north. Our longitude, at this time, was 192° 34′, and our latitude 68° 22′. We proceeded along the edge of the ice to the north-northeast, during the remainder of the day, passing through many loose pieces which had been separated from the main body, and against which our vessels were driven with great violence, notwithstanding our utmost caution. About eight in the evening we passed some drift-wood; at mid-night the wind veered to the northwest; and there were continued showers

of snow and sleet. The thermometer had now fallen from 38° to 31°.

The next morning, at five o'clock, the wind shifting more to the northward, we could continue no longer on the same tack, by reason of the ice, but were under the necessity of standing towards the west. Our depth of water, at this time, was nineteen fathoms; from which, upon comparing it with our remarks on the soundings in the preceding year, we inferred, that our present distance from the coast of America did not exceed six or seven leagues; but our view was circumscribed within a much narrower compass, by a heavy fall of snow. Our latitude at twelve o'clock was 69° 21′, and our longitude 192° 42′.

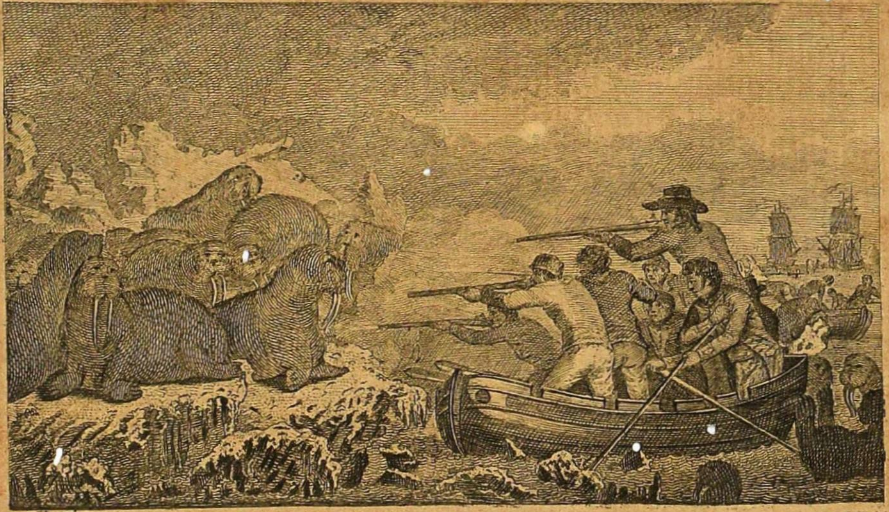
At two in the afternoon, the weather became clearer, and we found ourselves close to the expanse of ice, which, from the mast-head, was discovered to consist of very large compact bodies, united towards the exterior edge, but, in the interior parts, some pieces were observed floating in vacant spaces of the water: it extended from west-southwest to northeast by north. We bore away towards the south, along the edge of it, endeavouring to get into clearer water; for the strong northerly winds had drifted down such numbers of loose pieces, that we had been encompassed with them for some time, and were unable to prevent the ships from striking against several of them.

On Friday the 9th, a fresh gale blew from the north-northwest, accompanied with violent showers of snow and sleet. The thermometer, at noon, was at 30. We steered west-southwest, and kept as near the main body of ice as we could; but had

the misfortune to damage the cut-water against the drift pieces, and rub off some of the sheathing from the bows. The shocks, indeed, which our ships received, were frequently very severe, and were attended with considerable hazard. Our latitude, at noon, was 69° 12′, and our longitude 188° 5′.

Having now sailed almost forty leagues to the west, along the edge of the ice, without perceiving any opening, or a clear sea beyond it towards the north, we had no prospect of making further progress to the northward at present. Captain Clerke, therefore, determined to bear away to the south by east, the only quarter which was clear, and to wait till the season was somewhat more advanced before he made any further attempts to penetrate through the ice. He proposed to employ the intermediate time in surveying the bay of St Lawrence, and the coast situate to the south of it; as it would be a great satisfaction to have a harbour so near, in case of future damage from the quantity of ice in these parts. We were also desirous of paying another visit to the Tschutski; and more particularly since the accounts we had heard of them from Major Behm.

In consequence of this determination, we made sail to the southward till the 10th at noon, when we passed considerable quantities of drift ice and a perfect calm ensued. The latitude at this time, was 68° 1′, and the longitude 188° 30′. This morning we saw several whales; and in the afternoon, there being great numbers of sea-horses on the pieces of ice that surrounded us, we hoisted out the boats, and sent them in pursuit of those animals. Our people had more success on this occa-



J. Webber Del. T. Hill Sc.

SEA HORSES.

sion than they had on the 6th; for they returned with three large ones, and a young one, besides having killed or wounded some others. They were witnesses of several striking instances of parental affection in these animals. All of them, on the approach of the boats towards the ice, took their young ones under their fins, and attempted to escape with them into the sea. Some whose cubs were killed or wounded, and left floating upon the surface of the water, rose again, and carried them down, sometimes just as our men were on the point of taking them into the boat; and could be traced bearing them to a considerable distance through the water, which was stained with their blood. They were afterwards observed bringing them, at intervals, above the surface, as if for air, and again plunging under it, with a horrid bellowing. The female, in particular, whose young one had been killed, and taken into the boat, became so furious, that she even struck her two tusks through the bottom of the cutter.

About eight o'clock in the evening an easterly breeze sprung up, with which we continued to steer to the southward; and, at midnight, fell in with many extensive bodies of ice. We attempted to push through them under an easy sail, that the ships might sustain no damage; and when we had proceeded a little farther towards the south, nothing was visible but a very large and compact mass of ice, extending to the northeast, southwest, and southeast, as far as the eye could reach. This formidable obstacle prevented our visiting the Tschutski; for no

space remained open, except back again to the northward. We therefore tacked, at three o'clock, in the morning of the 11th, and stood to that quarter. The latitude, at noon, was 67° 49', and the longitude 188° 47'.

On Monday the 12th we had light winds and hazy weather. On examining the current, we found it set towards the northwest, at the rate of half a mile an hour. We continued our northerly course, with a breeze from the south, and fair weather, till ten o'clock in the morning of the 13th, when we again found ourselves close in with a solid mass of ice, to which we could perceive no limits from the mast-head. This was an effectual discouragement to all our hopes of penetrating further; which had been greatly raised, by our having now advanced almost ten leagues, through a space, which, on the 9th, had been found to be occupied by impenetrable ice. Our situation, at this time, was nearly in the middle of the channel, betwixt the two continents; our latitude was 69° 37'; and the main body of the ice extended from west-southwest to east-northeast.

As, in that part of the sea where we now were, there was no probability of getting further to the north, Captain Clarke determined to make a final attempt on the coast of America, for Baffin's Bay, since we found it practicable to advance the furthest on this side, in the preceding year. We accordingly, during the remainder of the day, worked to the windward, with a fresh breeze from the east. We observed several fulmers and arctic gulls, and passed two trees, both of which seemed to have lain a long time in the water. The larger one was,

in length, ten or eleven feet, and in circumference, about three, without either the bark or branches.

We proceeded to the eastward on the 14th, with thick foggy weather. The next day, the wind blowing fresh from the west, and having, in some measure, dispersed the fog, we immediately steered to the north, in order to have a nearer view of the ice; and we were soon close in with it. It extended from north-northwest to northeast, and was solid and compact: the exterior parts were ragged, and of various heights; the inner surface was even; and, as we supposed, from eight to ten feet above the level of the sea. The weather becoming moderate during the rest of the day, we shaped our course according to the trending of the ice, which, in several places, formed deep bays.

The wind freshened in the morning of the 16th, and was accompanied with frequent thick showers of snow. At eight o'clock in the morning we had a strong gale from the west-southwest, which brought us under double-reefed top-sails; when, the weather in some degree clearing up, we found ourselves, as it were, embayed; the ice having suddenly taken a turn to the south-eastward, and encompassing us, in one compact body, on all sides but the south. In consequence of this, we hauled our wind to the southward, being, at that time, in twenty-six fathoms water, and in the latitude of 70° 8′ north; and, as we imagined, at the distance of about five and twenty leagues from the American coast.

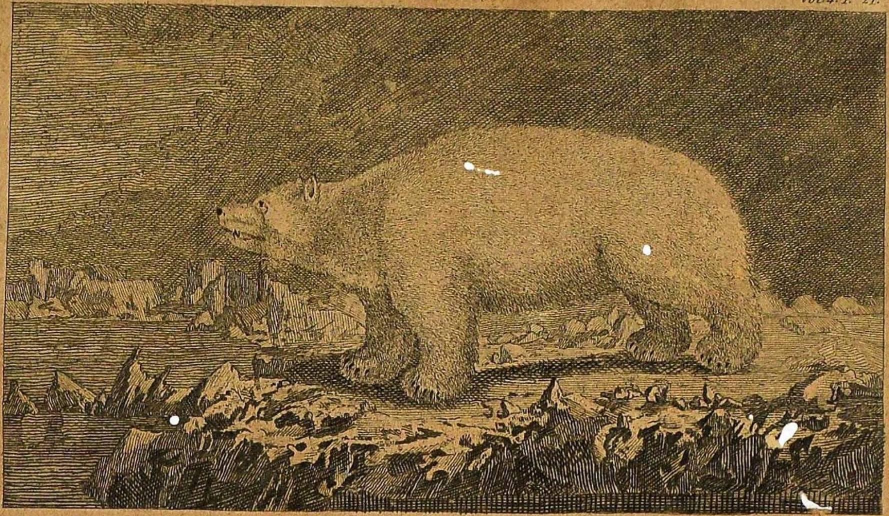
At four in the afternoon the gale increasing, we got the top-gallant-yards down upon the deck, furled the mizen-top-sail, and close-reefed the fore and main-top-sails. About eight o'clock, finding that

our soundings had decreased to twenty-two fathoms, which we considered as an indication of our near approach to the coast of America, we tacked and steered to the northward. In the night we had boisterous weather, attended with snow: but, the next morning, it was clear and moderate; and, at eight o'clock, we got up the top-gallant yards across, and bore away, with the wind still at west-southwest. Our latitude, at noon, was 69° 55′, and our longitude, 194° 30′. The wind slackened in the evening, and, about mid-night, we had a calm.

A light breeze arising from the east-northeast, at five in the morning of the 18th, we continued our progress towards the north, with a view of regaining the ice as soon as possible. We saw numbers of sea-parrots, and small ice-birds, and also many whales; and passed several logs of drift-wood. The latitude, at twelve o'clock, was 70° 26′, and the longitude 194° 54′. Our soundings, at the same time, were three and twenty fathoms; and the ice extended from north to east-northeast, being about one league distant.

At one o'clock in the afternoon, observing that we were close in with a firm united mass of ice, stretching from east to west-northwest, we tacked, and, the wind veering to the westward, stood to the east, along the edge of it, till eleven in the evening. A very thick fog then coming on, and the depth of water decreasing to nineteen fathoms, we hauled our wind to the southward.

Though we perceived no sea-horses on the body of ice, yet, on the detached fragments of it, they were seen in herds, and in greater numbers than we



J. Webber Delt. T. Hill Sc.

WHITE BEAR.

had ever before observed. About nine o'clock in the evening a white bear swam close by the Discovery, and afterwards went towards the ice, on which were likewise two others.

The weather clearing up at one in the morning of the 19th, we bore away to the northeast till two o'clock, when we were again so completely embayed by the ice, that no opening remained, except to the southward; to which quarter we therefore directed our course, and returned through a very smooth water, with favourable weather, by the same way we had come in. We were unable to penetrate farther towards the north at this time, than when our latitude was 70° 33′, which was about five leagues short of the point to which we had advanced the preceding summer. We stood to the south-southwest, with light winds from the northwest, near the edge of the main body of ice, which was situate on our left hand, extending between us and the American coast. At noon, our latitude was 70° 11′, and our longitude 196° 15′; and our soundings were sixteen fathoms. We supposed from this circumstance that the Icy Cape was at the distance of only seven or eight leagues from us: but, though the weather was, in general, pretty clear, there was, at the same time, a haziness in the horizon; so that we could not expect to have an opportunity of seeing the cape.

Two white bears appearing in the water during the afternoon, some of our people immediately pursued them in the jolly boat, and were so fortunate as to kill them both. The larger one, which was, in all probability, the dam of the younger, being shot first, the other would not leave it, though it

might have escaped with ease on the ice, while the men were re-loading their musquets; but continued swimming about, till, after after having been several times fired upon, it was shot dead. The length of the larger one, from the snout to the end of the tail, was seven feet two inches; its circumference, near the fore legs, was four feet ten inches; the height of the shoulder was four feet three inches; and the breadth of the fore paw was ten inches. The weight of its four quarters was four hundred and thirty-six pounds. The four quarters of the smallest weighed two hundred and fifty-six pounds.

These animals furnished us with some good meals of fresh meat. Their flesh, indeed, had a strong fishy taste, but was infinitely superior to that of the sea-horse; which, however, our people were again persuaded, with no great difficulty, to prefer to their salted provisions.

On Tuesday the 20th, at six in the morning, a thick fog arising, we lost sight of the ice for the space of two hours; but when the weather became clearer, we again had a view of the main body to the south-southeast; and immediately hauled our wind, which was easterly, towards it, expecting to make the American coast to the southeast, which we effected between ten and eleven o'clock. The latitude, at noon, was 69° 33′, and the longitude 194° 53′. Our depth of water, at the same time, was nineteen fathoms. The land was at the distance of eight or ten leagues, extending from south by east to south-southwest, half west, being the same we had seen the preceding year; but it was at present much more covered with snow than at

that time; and the ice seemed to adhere to the shore.

We continued to sail in the afternoon through a sea of loose ice, and to steer towards the land, as near as the wind, which blew from east-southeast, would permit. A thick fog came on at eight o'clock in the evening, and the wind abated. Observing a rippling in the water, we tried the current, and found it set to the east-northeast, at the rate of a mile in an hour: we therefore resolved so steer before the wind, during the night, in order to stem it, and oppose the large pieces of loose ice, which were setting us on towards the coast. Our soundings, at mid-night, were twenty fathoms.

The next morning, at eight o'clock, the wind freshening, and the fog dispersing, we again had sight of the coast of America to the south-eastward, at the distance of nine or ten leagues, and hauled in for it; but the ice in a short time effectually stopped our further progress on that side, and we were obliged to bear away towards the west, along the edge of it. Our latitude, at twelve, was 69° 34′; our longitude was 193°, and our soundings were twenty-four fathoms.

A connected solid field of ice, thus baffling all our efforts to make a nearer approach to the land, and (as we had some reason to imagine) adhering to it, we relinquished all hopes of a northeast passage to Great Britain.

Captain Clerke now finding it impossible to advance farther to the northward on the American coast, and deeming it equally improbable that such a vast quantity of ice should be dissolved by the few remaining weeks that would terminate the summer,

considered it as the best step that could be taken, to trace the sea over to the coast of Asia, and endeavour to find some opening that would admit him further north, to see what more could be done upon that coast, where he hoped to meet with better success.

We have already mentioned the reasons which determined captain Clerke to make no further attempts on the American coast, and to make his last efforts to discover a passage on the coast of the opposite continent.

In the afternoon of Wednesday the 21st of July we continued to steer through much ice to the west-northwest; but, about ten at night, we discovered through the fog the principal body of it, almost close a-head of us, and being unwilling to take a southerly course, if it could be avoided, we stood to the northward; in less than an hour, however, we were obliged to tack to the south-southwest, as we found ourselves surrounded by a compact field of ice.

It is proper here to observe, that we had twice traversed this sea, since the 8th of this month, and that in lines almost parallel with the course we now steered; the first time we were unable to penetrate so far north as the second by eight leagues, and that this last time a compact body of ice had been observed commonly five leagues further south than before. This clearly proves, that the vast and solid fields of ice which we had seen, were decreasing, or moveable, and entirely precludes any well-grounded hope of its being practicable to proceed further even in the most favourable seasons.

We steered westward, about seven in the even-

ing, as then no ice was to be seen; but we soon afterwards found ourselves close by the main body of it, we were consequently necessitated to steer again to the eastward, and to keep plying to windward during the night, in order to avoid the loose pieces of ice, which surrounded us often in such quantities as to endanger our being blocked up by them.

Next morning we found the clear water, in which we were attempting to stand to and fro, did not exceed a mile and a half, and was speedily lessening; at half past seven we forced our passage to the southward, which we accomplished with great difficulty. The Discovery was not however so fortunate, for, about eleven o'clock, when she had almost got through, several large pieces of ice were driven so forcibly upon her, that she fell, with her broad-side foremost, upon the edge of a large body of ice, upon which she was driven very violently, having an open sea to windward. The mass having in a little time been somewhat moved, or broken, she had just got free so far as to make an attempt to escape, when she again fell to leeward on another fragment. The swell on the sea at this time made it dangerous to lie to windward, they therefore pushed into a small opening, furled their sails, and made fast with ice-hooks, having no prospect of getting clear. We observed them thus critically situate about noon, standing to the north-west, about three miles from us, while the body of ice betwixt us was fast increasing by a south-easterly gale. At this time we had twenty-eight fathoms water, longitude 187° latitude 69° 8′. To add to our dismal apprehensions, the weather in a little

became so hazy, that we lost sight of the Discovery; meantime we kept close to the edge of the ice, to be as near her as possible. After being much alarmed for her fate the whole afternoon, about nine we were agreeably surprised to hear her answer our signal of firing a gun, which we had continued ever since we had lost sight of her. In a little we were hailed by her, and informed that the wind having changed to the north, the ice was somewhat cleared, she therefore had bent all her sails, and forced a passage through; that, while she had been encompassed by the ice, the ship had drifted to the eastward, with the main body, nearly half a mile an hour. We were concerned to learn that the strokes she had received in falling on the edge of the ice, had rubbed off a great part of the sheathing from her bows, and she had become very leaky.

Next forenoon the course we had continued to the southeast was again obstructed by a large body of loose ice, to which we could see no end, though the day was clear. We therefore plied to windward, our latitude at noon being 68° 53′, and our longitude 188°, variation of compass 22° 30′ east. In the afternoon, being calm, we sent out the boats in pursuit of sea-horses, of which vast herds were on every side of us. They killed ten, which was a sufficient quantity both for eating, and converting into lamp oil. We continued sailing along by the edge of the ice, which was almost due east and west, till Sunday morning the 25th, when we stood to the southeast, observing a clear sea in that direction. We forced our way through the shoal to it, and by mid-day there was no ice in sight. We

continued plying to the southeast till about ten next day, when we noticed a large body of ice, extending from northwest to south; at this time our longitude was 188° to east, latitude 68° north. During the remainder of this, and all the succeeding day, we plied backwards and forwards, endeavouring to avoid the shoals of ice. About noon, on the 27th, we discovered the coast of Asia bearing south and south by east; this afternoon we plied to the southwest, with a southeast wind, and about four o'clock were encompassed with large heaps of ice, with a large body of it in view, extending further than the eye could reach in a south by east and north by east direction.

Finding it necessary that some determination should be immediately taken what course was proper to be pursued, the carpenters were ordered aboard the Discovery to examine into her situation; whose report, along with that of captain Gore, was, that her damages were such as required touching immediately at some port, and that they would be at least three weeks in repairing. Captain Clerke therefore determined to steer immediately for Awatska bay, to repair our damages, and if possible to explore the coast of Japan before the winter set in; and this he resolved on, not only from captain Gore's report of the situation of the Discovery, but that any attempt to proceed further to the northward, or to approach nearer to the continent on either hand, was utterly impracticable.

The joy which every countenance aboard the ships expressed on this resolution being made public needs not be concealed. Heartily sick of a navigation so dangerous, with so little prospect of

success, we turned our faces homewards with as much seeming satisfaction as if we were already at the Land's End.

On the 28th and 29th we made but little progress to the southward, the breeze from the southeast being pretty strong, and passed Cape Serdze Kamen, so named on the authority of Muller. At seven in the evening of the 30th we observed Cape Prince of Wales, about six leagues distant, bearing south by east; as also the island of St Diomede, bearing southwest by west. Having altered our course to the west, we made the East Cape by eight. Having steered south-southwest through the night, at four in the morning the East Cape bore north-northeast, and the northeast corner of St Lawrence bay, where we last year anchored, bore west by south, at four leagues distance. We regretted much that we had it not in our power to pay another visit to the Tschutski, as we could not have wrought up to windward without consuming more time than we could either spare or the object deserved.

Being now past Beering's Straight, and having bid a final adieu to the northeast coast of Asia, we will mention the grounds on which we have ventured to oppose the opinions of Mr Muller. First, that the most easterly point of that quarter of the globe is the promontory named East Cape; or, that the most eastern longitude of the continent is 198° 22′ east; and again, that the latitude of the eastern extremity falls to the southward of 70° north. As to the first, such land, if it exists, must necessarily lie to the northward of latitude 69°, where our present discoveries are terminated; we

will therefore, in the first place, endeavour to investigate the probable direction of the coast.

The only navigators of these seas hitherto have been the Russians, consequently the charts and journals of those, who have been from time to time employed in determining the limits of that empire, are our only directions as to the situations of the coast beyond Cape North; and, a proper notion of their pretended, much less their real discoveries, is very difficult to be formed from their confused accounts. Hence arises the disagreement of Russian geographers concerning the size and shape of the peninsula inhabited by the Tschutski. In Mr Muller's map, published in 1754, it is supposed to reach the 75th degree of latitude, and 190° east longitude of Greenwich, and that it terminates in a round cape, named by him Tschukotskoi Noss. To the southward of this he conceives a bay is formed to the westward, the northernmost point of which is Serdze Kamen, latitude 67° 18′. The whole peninsula is entirely differently formed again, in the map published in 1776 by the Petersburg Academy, who place it thus: The north-easternmost extremity, latitude 73°, longitude 178° 30′—The easternmost point, latitude 65° 30′, longitude 189° 30′. Any other maps we have seen vary from both these, probably more from conjecture than any solid reasons. In general, however, they agree in this, that the East Cape is situate in latitude 66°. No regard can be paid to the Academy map, as to the shape of the coast, either to the south or north of this cape. Mr Muller's map in general coincides with our survey, so far as ours goes, only, to the westward, it does not trend

enough; in the latitude of 66° and 69°, it only recedes 5° instead of 10° at least. Between the latitude of 69° and 74°, he marks the coast as forming a considerable promontory, by bending round to the north and northeast. We shall now examine upon what authority.

This subject has been much elucidated by Mr Coxe, who is of opinion that none ever passed the point of the *Noss* in question but Deshneff and his party in 1648, who are said to have passed round it into the Anadir. In Mr Coxe's account of Russian Discoveries, the particulars of this navigation may be seen at large; but as it contains no geographical description of the coast, accidental circumstances are the only direction for its situation; from these it is however very clear, that the promontory which captain Cook named the East Cape, is the Tschukotskoi Noss of Deshneff. Of this Noss, he says, "One might sail from the isthmus to the river Anadir in three days and nights, with a fair wind. Now, as the East Cape is about one hundred and twenty leagues from the mouth of the Anadir, and betwixt that and 69° of latitude there is no isthmus to the north, it is clear he must either mean the East Cape or one more southerly." Again, he says, "Over against the isthmus there are two islands in the sea, upon which were seen people of the Tschutski nation, through whose lips were run pieces of the teeth of the sea-horse." This exactly corresponds with the two islands on the southeast of the cape. It is true, we saw no inhabitants; but it is far from improbable that some of the Americans of the opposite continent, whom he might readily mistake for a tribe

of the Tschutski, might accidentally be there; and it is noticeable, that this description exactly suits him *.

We shall now mention some other proofs, which tend to confirm the point, though not so clearly as the preceding two, which appear to us conclusive. Deshneff elsewhere says, "To go from the Kovymar to the Anadir, a great promontory must be doubled, which stretches very far into the sea." Again, "This promontory stretches between north and northeast." In these passages, we probably have Mr Muller's principal authority, for giving the country of the Tschutski the form he has done in his map; to invalidate which we may notice, that Deshneff is all along speaking of the same place, and had Mr Muller understood the situation of East Cape, and its great similarity in shape to the other, he would not have considered these

* From the circumstance, which gave name to Sledge Island, formerly mentioned, it is certain, that the inhabitants of the continent occasionally visit the adjacent small islands, probably for fishing, or in search of furs. Popoff's deposition, which will be mentioned hereafter, gives a good reason for Deshneff supposing them to be of the Tschutski, from the great resemblance between them, and the inhabitants of the Islands. He says, that, "Opposite to the Noss, is an island of moderate size, without trees, whose inhabitants *resemble, in their exterior, the Tschutski, although they are quite another nation*, not numerous indeed, yet speaking their own particular language." Likewise, in another place, "One may go in a baidare from the Noss, to the island in half a day: beyond is a great continent, which can be discovered from the continent in serene weather. When the weather is good, one may go from the island to the continent in a day. *The inhabitants of the continent are similar to the Tschutski, excepting that they speak another language.*

words a sufficient foundation for streching the northeast extremity of Asia, either so far north or east, as he has done. Indeed, if Deshneff took his bearings from the small bight, lying to the westward of the cape, his account is by no means contradictory to our opinion.

Besides that just mentioned, we can think of no authority for Mr Muller's opinion, if it be not the deposition of Cossack Popoff, taken in 1711, at the Anadirski *ostrog*. He, with several other Cossacks, had been sent by land, to demand a tribute from the independent Tschutski tribes living about the Noss. The first circumstance tending to throw light on the subject from this journey is its distance from Anadirsk; which, Popoff says, was ten days travelling, with loaded rein-deer, consequently, their day's journey short! a very uncertain method of calculation; but our opinion will at least receive a negative support from it, when we mention, that the distance is upwards of 200 leagues in a straight line, so that it is but a moderate allowance to give 15 miles a day. The deposition then mentions their travelling by the foot of a rock called Mathol, situate at the bottom of a great gulf. This Muller supposes to be the bay he laid down between latitude 66° and 72°, and accordingly places Mathol in the centre of it. But as they behoved to touch somewhere in the gulf of Anadir, this seems more probable, were there no other reasons to doubt the existence of Muller's gulf.

But the part of Popoff's deposition quoted in the preceding note gives good ground to believe, that the cape visited by him cannot be to the northward of 69° latitude: for, as at that latitude,

the two continents are more than 300 miles separate from each other, that the Asiatic coast should again trend so much to the eastward, as to be within sight, is a ridiculous supposition.

It is needless to enter further into the arguments on this subject, further than barely mentioning, that Mr King is decidedly of opinion that the Tschukotskoi Noss not only of Deshneff, but all the more early Russian navigators, is the East Cape; and that the Asiatic coast nowhere exceeds 70° northern latitude, before it trends to the westward; and consequently that we were within 1° of its northeastern extremity.

It is highly probable, that a northwest passage from the Atlantic into the Pacific Ocean does not exist to the southward of the fifty-sixth degree of latitude. If, therefore, a passage really exists, it must certainly be either through Baffin's bay, or by the north of Greenland, in the western hemisphere; or in the eastern, through the Frozen Sea, to the north of Siberia; and on which ever side it is situate, the navigator must pass through the straits distinguished by the name of Beering's Straits. The impracticability of penetrating into the Atlantic Ocean on either side, through these straits, is therefore all that now remains to be offered to the reader's consideration.

The sea to the northward of Beering's Straits, was found by us to be more free from ice in August than in July, and perhaps in some part of September it may be still more clear of it. But, after the autumnal equinox, the length of the day diminishes so fast, that no further thaw can be expected; and we cannot reasonably attribute so great an effect to

the warm weather in the first fortnight in the month of September, as to imagine it capable of dispersing the ice, from the most northern parts of the coast of America. Admitting this, however, to be possible, it must at least be allowed, that it would be highly absurd to attempt to avoid the Icy Cape by running to the known parts of Baffin's Bay, (a distance of about twelve hundred and sixty miles) in so short a space of time as that passage can be supposed to remain open.

There appears, on the side of Asia, still less probability of success, not only from what came to our own knowledge, relative to the state of the sea to the southward of Cape North, but likewise from what we have gathered from the experience of the lieutenants under the direction of Beering, and the journal of Shalauroff, respecting that on the north of Siberia.

The possibility of sailing round the north-eastern extremity of Asia, is undoubtedly proved by the voyage of Deshneff, if its truth be admitted; but when we reflect, that, since the time of that navigator, near a century and a half has elapsed, during which, in an age of curiosity and enterprise, no person has yet been able to follow him, we can entertain no very sanguine expectations of the public benefits which can be derived from it. But even on the supposition, that, in some remarkably favourable season, a vessel might find a clear passage round the coast of Siberia, and arrive in safety at the mouth of the Lena, still there remains the Cape of Taimura, extending to the seventy-eighth degree of latitude, which no navigator has hitherto had the good fortune to double.

Some, however, contend, that there are strong reasons for believing, that the nearer approach we make to the pole, the sea is more clear of ice; and that all the ice we observed in the lower latitudes, had originally been formed in the great rivers of Siberia and America, from the breaking up of which the intermediate sea had been filled. But even if that supposition be true, it is no less certain that there can be no access to those open seas, unless this prodigious mass of ice is so far dissolved in the summer, as to admit of a ship's making its way through it. If this be the real fact, we made choice of an improper time of the year for attempting to discover this passage, which should have been explored in the months of April and May, before the rivers were broken up. But several reasons may be alleged against such a supposition. Our experience at Petropaulowska gave us an opportunity of judging what might be expected further northward; and, upon that ground, we had some reason to entertain a doubt, whether the two continents might not, during the winter, be even joined by the ice; and this coincided with the accounts we heard in Kamtschatka, that, on the coast of Siberia, the inhabitants, in winter, go out from the shore, upon the ice, to distances that exceed the breadth of the sea, in some parts, from one continent to the other.

The following remarkable particular is mentioned in the deposition above referred to. Speaking of the land seen from the Tschutski Noss, it is said, that, during the summer, they sail in one day to the land in *baidares*, a kind of a vessel formed of whalebone, and covered with the skins of seals; and, in

the winter, as they go swift with rein-deer, the journey may also be performed in a day. A satisfactory proof, that the two countries were generally connected by the ice.

Muller's account of one of the expeditions undertaken for the purpose of discovering a supposed island in the Frozen Ocean, is still more remarkable. His narrative is to the following purport. In 1714, a new expedition was prepared from Jakutzk, under the conduct of Alexei Markoff, who was to set sail from the mouth of the Jana; and if the Schitiki were not well adapted for sea voyages, he was to build, at a convenient place, proper vessels for prosecuting the discoveries without any great risque. Upon his arrival at Ust-janskoe Simovie, the port where he was to embark, he dispatched an account, dated the 2d of February, 1715, to the Chancery of Jakutzk, intimating that it was impracticable to navigate the sea, as it was constantly frozen both in winter and summer; and that, consequently, the expedition could only be prosecuted with sledges drawn by dogs. He accordingly set out in this manner, accompanied by nine persons, the 10th of March, in the same year, and returned to Ust-janskoe Simovie on the 3d of the succeeding month. The account of his journey is as follows: That, for the space of seven days, he travelled with as much expedition as his dogs could draw, (which, in good tracks, and favourable weather, is from eighty to a hundred wersts in a day) directly to the northward, upon the ice, without observing any island: that he was prevented from proceeding further, by the ice, which rose like mountains in that part of the sea: that he had ascended some of the hills of ice,

whence he could see to a great distance around him, but could discern no land: and that, at length, provisions for his dogs being deficient, many of them died, which reduced him to the necessity of returning.

Besides the arguments already mentioned, which proceed upon an admission of the hypothesis, that the ice in this ocean comes from the rivers, others may be adduced, which afford good reason for suspecting the truth of the hypothesis itself. Captain Cook, whose opinion with regard to the formation of the ice, had originally coincided with that of the theorists we are now endeavouring to confute, found sufficient grounds, in the present voyage, for changing his sentiments. We observed that the coasts of both continents were low, that the depth of water gradually decreased towards them, and that a striking resemblance prevailed between the two; from which circumstances, as well as from the description given by Mr Hearne of the copper-mine river, we have room for conjecturing, that whatever rivers may discharge themselves into the Frozen Ocean, from the continent of America, are of a similar nature with those on the Asiatic side; which are said to be so shallow at their entrance, as to admit only vessels of inconsiderable magnitude; whereas, the ice seen by us, rises above the level of the sea, to a height that equals the depth of those rivers; so that its entire altitude must be, at least, ten times greater.

Another circumstance will naturally offer itself, in this place, to our consideration, which seems to be very incompatible with the opinion of those who suppose that land is necessary for the formation

of the ice; we mean the different state of the sea about Spitsbergen, and of that which is to the northward of Beering's Straits. It is incumbent on those philosophers to explain how it happens, that in the former quarter, and in the neighbourhood of much known land, navigators annually penetrate to near eighty degrees of northern latitude; whereas, on the other side, no voyager has been able, with his utmost efforts, to proceed beyond the seventy-first degree; where, moreover, the continents diverge nearly in the direction of east and west, and where there is no land yet known to exist in the vicinity of the pole. For the further satisfaction of our readers on this subject, we refer them to Dr Forster's "Observations round the World," where they will find the question, of the formations of the ice, discussed in a full and satisfactory manner, and the probability of open polar seas, disproved by many forcible arguments.

To these remarks we shall subjoin a comparative view of the progress made by us to the northward, at the two different seasons in which we were occupied in that pursuit; together with some general observations respecting the sea, and the coasts of the two continents, which lie to the north of Beering's Straits.

In the year 1778 we did not discover the ice, till we advanced to the latitude of 70°, on the 17th of August; and we then found it in compact bodies, which extended as far as the eye could discern, and of which the whole, or a part, was moveable; since, by its drifting down upon our ships, we were almost hemmed in between that and the land. After we had experienced, both how fruitless and dan-

gerous it would be, to attempt to penetrate further to the northward, between the land and the ice, we stood over towards the side of Asia, between the latitudes of 69° and 70°; after encountering in this tract very large fields of ice, and though the fogs and thickness of the weather prevented us from entirely tracing a connected line of it across, yet we were certain of meeting with it before it reached the latitude of 70°, whenever we made any attempts to stand to the north.

On the 26th of August, in the latitude of 69°$\frac{3}{4}$ and the longitude of 184°, we were obstructed by it in such quantities, that we could not pass either to the north or west; and were under the necessity of running along the edge of it to the south-southwest, till we perceived land, which proved to be the Asiatic coast. With the season thus far advanced, the weather setting in with snow and sleet, and other indications of the approach of winter, we relinquished our enterprise for that time.

In our second attempt, we did little more than confirm the remarks made by us in the first; for we never had an opportunity of approaching the continent of Asia higher than 67° of latitude, nor that of America in any part, except a few leagues between the latitude of 68° and 68° 20′, that we had not seen in the preceding year. We now met with obstruction from ice 3° lower; and our efforts to make further progress to the northward, were chiefly confined to the middle space between the two coasts. We penetrated near 3° further on the side of America than that of Asia, coming up with the ice both years sooner, and in more considerable quantities, on the latter coast. As we advanced in

our northerly course, we found the ice more solid and compact; however, as in our different traverses from one side to the other, we passed over spaces which had before been covered with it, we imagined, that the greatest part of what we saw was moveable. Its height, on a medium, we estimated at eight or ten feet, and that of the highest at sixteen or eighteen. We again examined the currents twice, and found that they were unequal, though they never exceeded one mile an hour. We likewise found the currents to set different ways, but more from the southwest than any other quarter; yet, whatever their direction might be, their effect was so inconsiderable, that no conclusions, with respect to the existence of any passage towards the north, could possibly be drawn from them.

We found July infinitely colder than August. The thermometer, in the first of these months, was once at 28°, and very frequently at 30°; whereas, during the last year, it was very uncommon in August, to have it so low as the freezing point. In both seasons we experienced some high winds, all of which blew from the southwest. Whenever the wind was moderate from any quarter, we were subject to fogs; but they were observed to attend southerly winds more constantly than others.

The straits, between the American and Asiatic continents, at their nearest approach, in the latitude of 66°, were ascertained by us to be thirteen leagues, beyond which they diverge to northeast by east, and west-northwest; and in the latitude of 69°, their distance from each other is about three hundred miles. In the aspect of the two countries to the north of the straits, a great resemblance is

observable. Both of them are destitute of wood. The shores are low, with mountains further inland, rising to a great height. The soundings, in the midway between them, were twenty-nine and thirty fathoms, gradually decreasing as we approached either continent; with this difference, however, that the water was somewhat shallower on the coast of America than on that of Asia, at an equal distance from land. The bottom, towards the middle, was a soft slimy mud; and near either shore, it was a brownish sand, intermixed with a few shells, and small fragments of bones. We found but little tide or current, and that little came from the west.

We will now resume the narrative of our voyage, which was continued till the 31st of July; on which day we had proceeded, at noon, eighteen leagues to the southward of the East Cape. We had light airs from the southwest till the first of August, at noon, when our latitude was 64° 23′, and our longitude 189° 15′; the Asiatic coast extending from northwest by west, to west half south, at the distance of about twelve leagues, and the land to the eastward of St Lawrence bearing south half west.

On Monday the second, the weather being clear, we perceived the same land, at noon, extending from west-southwest half west to southeast, and forming many elevated hummocks, which bore the appearance of separate islands. The latitude, at this time, was 64° 3′, the longitude 189° 28′, and our soundings were seventeen fathoms. We were not near enough to this land to ascertain, whether it was a group of islands, or only a single one. We had passed its most westerly point in the evening of the third of July, which we then supposed to be the

isle of St Lawrence; the eastermost we sailed close by in September the preceding year, and this we denominated Clerke's island; and found it composed of a number of lofty cliffs, connected by very low land. Though these cliffs, the last year, were mistaken by us for separate islands, till we made a very near approach to the shore, we are still inclined to conjecture that the isle of St Lawrence is distinct from Clerke's Island, as there appeared betwixt them a considerable space, where we did not observe the least appearance of rising ground. In the afternoon, we likewise saw what had the appearance of a small island, to the northeast of the land that we had seen at noon, and which, from the thickness of the weather, we only had sight of once. We supposed its distance to be nineteen leagues from the island of St Lawrence, in the direction of northeast by east half east.

We had light variable winds on the 3d, and steered round the northwest point of the isle of St Lawrence. The next day, at noon, our latitude was 64° 8′, longitude 188°; the island of St Lawrence bearing south one quarter east, at the distance of seven leagues.

In the afternoon, a fresh breeze arising from the east, we steered to the south-southwest, and quickly lost sight of St Lawrence. On Saturday the seventh, at twelve o'clock, the latitude was 59° 38′, and the longitude 183°. We had a calm in the afternoon, and caught a great number of cod, in seventy-eight fathoms of water. From this period to the 17th, we were making the best of our way towards the south, without any remarkable occurrence, except that the wind blowing from the

west, forced us more to the eastward than we wished, it being our intention to make Beering's Island.

On Thursday the 17th, between four and five in the morning, we descried land to the northwest, which we could not approach, as the wind blew from that quarter. At mid-day, the latitude was 53° 49′, and the longitude 168° 5′. The land in view bore north by west, at the distance of twelve or fourteen leagues. This land we imagine to be the island of Mednoi, which is placed in the Russian charts to the southeast of Beering's Island. It is elevated land, and was at this time apparently free from snow. We reckon it to be in the latitude of 54° 28′, and the longitude of 167° 52′. We did not strike ground with one hundred and fifty fathoms of line.

Captain Clerke being now no longer able to get out of his bed, signified his desire, that the officers would receive their orders from Mr King; and directed that we should repair, with all convenient speed, to the bay of Awatska. The wind continuing westerly, we steered a southerly course till early in the morning of the 19th; when, after rain of a few hours continuance, it blew from the east, and increased to a strong gale. We made the most of it while it lasted, by standing towards the west, with all the sail we could bear. The next day, the wind varying to the southwest, we steered a west-northwest course. The latitude, at noon, was 53° 7′, and the longitnde 162° 49′. On the 21st, between five and six in the morning, we perceived a very lofty peaked mountain on the coast of Kamtschatka, known by the name of Cheepoonskoi

Mountain, bearing northwest by north, at the distance of between twenty-five and thirty leagues. At noon the coast was observed to extend from north by east to west, with a very great haziness upon it; and it was about twelve leagues distant. We had light airs during the remainder of this, as well as the following day, and found no ground with one hundred and forty fathoms of line.

At nine o'clock in the morning, on Sunday the 22d of August, Captain Charles Clerke expired, in the thirty-eighth year of his age. His death was occasioned by a consumption, which had manifestly commenced before his departure from England, and of which he had lingered, during the whole continuance of the voyage. His very gradual decay had for a long time rendered him a melancholy object to his friends; but the firmness and equanimity with which he bore it, the constant flow of good spirits, which he retained even to the last hour, and a chearful resignation to his fate, furnished them with some consolation. It was impossible not to feel an uncommon degree of compassion for a gentleman, who had experienced a series of those difficulties and hardships, which must be the inevitable lot of every seaman, and under which he at last sunk. He was bred to the navy from his youth, and had been in many engagements during the war which had begun in the year 1756. In the action between the Bellona and Courageux, he was stationed in the mizen-top, and was carried over-board with the mast; but was afterwards taken up, without having received the least injury. He was midshipman on board the Dolphin, commanded by commodore Byron, when she first sailed round the world; and

was afterwards on the American station. In the year 1768, he engaged in a second voyage round the world, in the situation of master's mate of the Endeavour; and, during the expedition, succeeded to a lieutenancy. In the Resolution he made a third voyage round the world, in the capacity of second lieutenant: and in a short time after his return in 1775, he was appointed master and commander. In the present expedition, he was appointed captain of the Discovery, and to accompany captain Cook. By the calamitous death of the other, he naturally succeeded, as has been already related, to the chief command.

It would savour of injustice and ingratitude to his memory, not to mention, that, during the short time he commanded the expedition, he was most remarkably zealous for its success. When the principal command devolved upon him, his health began rapidly to decline; and he was unequal in every respect to encounter the severity of a high northern climate. The vigour of his mind, however, was not in the least impaired, by the decay of his body: and though he was perfectly sensible that his delaying to return to a warmer climate, was depriving himself of the only chance of recovery; yet, so attentive was he to his duty, that he was determined not to suffer his own situation to bias his judgment to the prejudice of the service: he therefore persevered in the search of a passage, till every officer in the expedition, declared they were of opinion it was impracticable, and that any further attempts would be equally hazardous and ineffectual.

Captain King sent a messenger to captain Gore, to acquaint him with the death of captain Clerke,

who brought a letter from captain Gore, containing an order for captain King to exert his utmost endeavours to keep in company with the Discovery, and, if a separation should happen, to repair, as soon as possible, to St Peter and St Paul. Our latitude, at noon, was 53° 8′ north, and our longitude 160° 40′ east; Cheepoonskoi Noss then bearing west. In the afternoon we had light airs, which continued till noon on the 23d; when a fresh breeze springing up from the east, we steered for the entrance of Awatska bay; which we saw about six in the evening, bearing west-northwest, distant about five leagues. At eight, the light-house, which now furnished a good light, was about three miles distant, and bore northwest by west. It was now a perfect calm; but as the tide was favourable, the boats were sent a-head, and towed beyond the narrow parts of the entrance. On the 24th, at one in the morning, we dropped anchor, the ebb tide then setting against us.

We weighed about nine o'clock, and went up the bay with light airs, which being afterwards succeeded by a fresh breeze, we anchored before three in the harbour of St Peter and St Paul; having up our ensign half staff, as the body of our late captain was in the vessel; and the Discovery followed us in a very short time.

Soon after we had anchored, we were visited by our old friend the serjeant, (still the commanding officer of the place) who brought with him a present of berries, intended for captain Clerke. He was much affected at hearing of his death, and seeing the coffin wherein his body was deposited. As the deceased captain had particularly requested to

be buried on shore, and gave the preference to the church at Paratounca, we embraced this opportunity of consulting with the serjeant, about the necessary steps to be pursued upon the occasion.

After much conversation on this subject, which was very imperfectly carried on, for want of an interpreter, we gathered intelligence that de L'Isle, and some other Russian gentlemen, who had died here, were buried near the barracks, at the *ostrog* of St Peter and St Paul, and that this place would certainly be more eligible than Paratounca, as the church was shortly to be removed thither. We therefore determined to wait the arrival of the priest of Paratounca, who was immediately to be sent for, as being the person best qualified to give us any information we required upon the subject. The serjeant, at the same time expressed his intentions of sending an express to the commander of Bolcheretsk, with intelligence of our arrival; when captain Gore begged to avail himself of that opportunity of conveying a letter to him, wherein he requested that sixteen head of black cattle might be sent with all possible dispatch. And, as the commander was unacquainted with any language except his own, the particulars of our request were communicated to the serjeant, who not only undertook to send the letter, but also an explanation of its contents.

It was a general remark among us, that, though the face of the country had improved in its appearance since we had left it, the Russians looked even worse than they did then. They made the very same observation with respect to us; and, as neither party seemed pleased with the discovery, we

mutually consoled ourselves by casting the blame upon the country, whose verdant and lively complexion, had occasioned an appearance of sallowness on our own.

Though the eruption of the volcano was so extremely violent when we quitted the bay, we were informed that no damage had been received from it here. Several stones, however, that were as large as a goose's egg, had fallen at the *ostrog*. This was the principal news we had to inquire after, and all the intelligence they had to communicate to us, excepting that of Soposnicoff's arrival from Oonalashka, who took charge of the pacquet sent by captain Cook to the Admiralty, and which, we had the pleasure to find, had been forwarded.

On the 25th of August, in the morning, captain Gore, in consequence of the death of captain Clerke, made out the new commissions. He appointed himself to the command of the Resolution, and Mr King to that of the Discovery. Mr Lanayan, who was master's mate of the Resolution, and who had been in that capacity in the former voyage, on board the Adventure, was appointed to the vacant lieutenancy. The following arrangements were the consequence of these promotions. Lieutenants Burney and Rickman (from the Discovery) were appointed first and second lieutenants of the Resolution; and lieutenant Williamson first lieutenant of the Discovery. Captain King, by the permission of captain Gore, took in four midshipmen, who had rendered themselves useful to him in astronomical calculations; and whose assistance was become the more necessary, as we had not an ephemeris for the present year. And, that astro-

nomical observations might not be neglected to be made in either ship, Mr Bailey took captain King's place in the Resolution.

On the same day we were attended by the worthy priest of Paratounca. His expressions of sorrow at the death of captain Clerke did honour to his feelings. He confirmed what the serjeant had related, with regard to the intended removal of the church, and assured us the timber was actually preparing, but submitted the choice of either place entirely to captain Gore.

As the Discovery had suffered great injury from the ice, especially on the 23d of July, and had continued exceedingly leaky ever since, it was apprehended that some of her timbers might have started; the carpenters of the Resolution were therefore sent to assist those of the Discovery in repairing her, and they accordingly began to rip the damaged sheathing from the larboard bow. It was discovered, by this operation, that three feet of the third strake were staved, and the timbers started. To accommodate those who were to be employed on shore, a tent was erected, and a party was sent into the country, north of the harbour, to fell timber. The observatories were placed at the west end of the village, near which was erected a tent, as an abode for the captains Gore and King.

As we proceeded to remove the sheathing, the decayed state of the ship's hull became more and more apparent. Eight feet of a plank in the wale were so exceedingly rotten, that we were obliged to shift it the next morning. We were now totally at a stand, as nothing could be found to replace

it in either ship, without cutting up a top-mast; which ought to be the last expedient to have recourse to. In the afternoon, the carpenters were dispatched in search of a tree of a proper size for the purpose. Fortunately they discovered a birch, which was probably the only one of sufficient magnitude in the whole neighbourhood of the bay, and which we had sawed down when we were last here; consequently it had the advantage of being a little seasoned. This was prepared on the spot, and taken on board the Discovery the next morning.

The season being now far advanced, captain King was unwilling that any hindrance or delay should happen through him to captain Gore's further views of discovery, and therefore ordered the carpenters to rip off no more of the sheathing than should be found absolutely necessary for repairing the damages occasioned by the ice. He was apprehensive of their meeting with more decayed plants, which he thought had better remain in that state, than have their places supplied with green birch, even supposing it could be procured.

All hands were now fully employed in their several departments, that we might be perfectly ready for sea, by the time the carpenters had completed their business. Four men were set apart to haul the seine for salmon, which were caught in immense quantities, and were of a most excellent quality. After the wants of both ships were sufficiently supplied, we daily salted down almost a hogshead. We had four invalids, who were employed gathering greens, and cooking for those who were on shore. We also landed our powder, in order to have it

dried; and the blubber of the sea-horses, with which both ships had completely furnished themselves, in our passage to the north, was now boiled down for oil, and was now become a very necessary article, having long since expended all our candles. The cooper was also employed in his department.

Both ships' companies were thus fully engaged till Saturday afternoon, which was given up to every man (except the carpenters) to enable them to wash their linen, and get their clothes in tolerable order, that they might appear decently on the Sunday.

On Sunday the 29th, in the afternoon, we performed the last sad offices to captain Clerke. The officers and crews of the two vessels attended him in procession to the grave; the ships, at the same time, firing minute guns; and, at the conclusion of the service, three volleys were fired by the marines. The body was interred under a tree, which stands on a little eminence in the valley north of the harbour, where the store-houses and hospital are situate; this being, as captain Gore supposed, such a situation as was most consonant to the wishes of the deceased. The Priest of Paratounca also recommended this spot, imagining it would be very near the centre of the new church. This worthy pastor joined the procession, walking with the gentleman who read the service. All the Russians in the garrison assembled on the occasion, and respectfully assisted in the solemnity.

On Monday the 30th, the several parties reassumed their respective employments, as particularly mentioned in the course of the preceding week: and on the 2d of September the carpenters proceeded to

rip off such of the sheathing as had had been injured by the ice, from the starboard side; having first shifted the damaged planks, and repaired and caulked the sheathing of the larboard bow. Four feet of a plank were discovered in the third strake under the wale, so much shaken as to require to be replaced; which was accordingly done; and on the 3d, the sheathing was repaired.

In the afternoon of the 3d we got some ballast on board; after which we unhung the rudder, and caused it to be conveyed on shore, the lead of the pintles being much worn, and a considerable part of the sheathing rubbed off. The carpenters of the Resolution not being immediately wanted, this was put in order the next day; but finding the rudder immoderately heavy, (heavier indeed than that of the Resolution) we let it remain on shore to dry, and consequently to become lighter.

An ensign arrived this day from Bolcheretsk, with a letter from the commander of that place to captain Gore; which we requested the Serjeant to peruse, and, by his assistance, we at length understood that proper orders had been given respecting the cattle, and that in a few days we might expect to see them; and that captain Shmaleff, who succeeded major Behm in his command, would pay us a visit immediately on the arrival of a sloop which he expected from Okotsk. The bearer of the letter was the son of captain-lieutenant Synd, who, about eleven years ago, was appointed to the command of an expedition of discovery between Asia and America, and now resided at Okotsk. He told us he was appointed to receive our directions, and to supply us with every thing our service might

require. That he should remain with us till it was convenient for the commander to leave Bolcheretsk; and then he was to return, or the garrison would be without an officer.

The Russians, in Kamtschatka, could not furnish us with a better account of Synd than Mr Coxe has given us; though they seemed entirely disposed to communicate what they really knew. Major Behm could only give us this general information, that the expedition had miscarried, and that the commander had been much censured. It was evident that he had been on the coast of America, south of Cape Prince of Wales; and, as he was too far north to meet with sea-otters, which the Russians seem to have in view in all their attempts at discoveries, it is probable that his return without having made any, from whence commercial advantages might be reaped, was the cause of his disgrace, and on that account his voyage is spoken of with contempt by all the Russians.

But, to proceed; on the 5th of September, all the parties that were on shore returned to the ship, and were employed in scrubbing her bottom, and getting in some shingle ballast. Two of our guns, which had been stowed in the fore-hold, we now got up, and mounted them on the deck, as we were shortly to visit those nations, where our reception would probably be regulated by the respectability of our appearance. On the 8th, the Resolution hauled on shore, in order to repair some damages she had received from the ice, in her cut-war; and our carpenters, in their turn, were ordered to assist her.

We began, about this time, to make a strong decoction from a species of dwarf pine, which is very

plentiful in this country, judging it would hereafter be useful in making beer, and that we might perhaps be able to procure sugar, or a substitute for it, to ferment with it at Canton. We knew, however, it would be an admirable medicine for the scurvy, and therefore were particularly desirous of procuring a considerable supply; as most of the preventives with which we had furnished ourselves, were either consumed, or had lost their efficacy through long keeping. When we had prepared about a hogshead of it, the ship's copper was found to be remarkably thin, and that, in many places, it was even cracked. This obliged us to desist, and orders were given that, for the future, it should be used as sparingly as possible.

Those who may hereafter be engaged in long voyages, would act judiciously if they provided themselves with a spare copper; or, at least, they should be fully convinced that the copper, usually furnished, should be remarkably strong and durable. These necessary utensils are employed in so many extra-services, particularly in that important one of brewing antiscorbutic decoctions, that some such provision seems absolutely necessary; and the former appears the more eligible, because a much greater quantity of fuel would be consumed in heating coppers that were very thick.

On Friday the 10th, the boats from both the ships were ordered to tow a Russian galliot into the harbour, which had just arrived from Okotsk. She had been no less than thirty-five days on her passage, and, from the light-house, had been observed a fortnight before, beating up towards the mouth of the bay. The crew had, at that time, dispatched

their only boat on shore, in order to procure water, which they were much in need of; but, the wind increasing, the boat was lost; the galliot was again driven to sea, and those on board suffered inconceivable hardships.

On board this galliot there were fifty soldiers, their wives, and children; they had also several passengers, and their crew consisted of twenty-five; making, in the whole, upwards of an hundred persons; which, for a vessel of eighty tons, was a great number, especially as she was heavily laden with stores and provisions. This galliot, and the sloop which we saw here in May, are built in the manner of the Dutch doggers.

Soon after the vessel had come to anchor, we were visited by a *Put-parouchick*, or sub-lieutenant, who arrived in her, and who was sent to take the command of this place. Some of the soldiers, we were informed, were intended to reinforce the garrison; and two pieces of cannon were brought on shore to serve as an additional defence to the town. From these circumstances, it is pretty apparent that the Russian commanders in Siberia had, from our visiting this place, been induced to attend to the defenceless situation of it; and the honest serjeant shrewdly observed, that, as we had found the way thither, others might do the same, who might not be made so welcome as ourselves.

Having repaired the damages which the Resolution had suffered by the ice, she hauled off from the shore the next morning; and, in the course of that day, we got some pitch, tar, cordage, and twine from the galliot. Their scanty store rendered them

unable to supply us with canvas, and they could not comply with our application for that article. She furnished us, however, with a hundred and forty skins of flour, amounting to 13,782 English pounds. Till this day we had a continual course of dry weather, but now a heavy rain succeeded, attended with strong squalls of wind, which occasioned us to strike our yards and top-masts.

Sunday the 12th was a day of rest; but, as the weather continued foul, our men could not employ themselves in gathering the berries which grew in such vast quantities about the coast, or amuse themselves by any other pastime on shore. Ensign Synd left us this day to return to Bolcheretsk, with the remainder of the soldiers who had arrived in the galliot. While he remained here, he had been our constant guest; and, on his father's account, we thought him in some degree belonging to us; and, as one of the family of discoverers, entitled to a share in our esteem.

The serjeant, as being commander of the place, had hitherto been admitted to our tables; and his company was additionally welcome to us, because he was sensible and quick in his conceptions; and comprehended, better than any other person, the few Russian words that we had acquired. Whilst ensign Synd remained among us, he very politely suffered him to enjoy the same privileges; but, when the new commander arrived from Okotsk, the serjeant, for what cause we did not understand, fell into disgrace, and was no longer permitted to sit in the company of his own officers. Our endeavours to obtain indulgence for him, we perceived, would have been ineffectual; for, though it would have

been highly agreeable to us, it was, perhaps, incompatible with their discipline.

On the 15th, we had completed the stowage of the holds, got our wood and water on board, and were ready for sea at a day's notice. But it should be observed, that though every thing on board was in this degree of readiness, we could not think of taking our departure, because the cattle were not yet arrived from Verchnei; and fresh provisions were now become the most important article of our wants, and essentially necessary for preserving the health of our people. As there was a prospect of fine weather, this was considered as a favourable opportunity of engaging in some amusement on shore, and acquiring some little knowledge of the country. A party of bear-hunting was therefore proposed by captain Gore, and the proposal was readily acceded to.

On Friday the 17th we set out on this expedition, which was deferred till that day, in order to give a little rest to the Hospodin Ivaskin, a new acquaintance who had arrived here on Wednesday, and who was to be of our party. Major Behm had desired this gentleman, who usually resides at Verchnei, to attend us on our return to the harbour, and assist us as an interpreter; and, from what we had heard of him before his arrival, our curiosity to see him was much excited.

He is allied to a considerable family in Russia, and his father was a general in the service of the empress. He received his education partly in Germany, and partly in France; he had been page to the empress Elizabeth, and bore an ensign's commission in her guards. At sixteen years of age he

was *knowted*, had his nose slit, and was banished to Siberia. He was afterwards transported to Kamtschatka, and had then resided there thirty-one years. His person was tall and thin, and his visage furrowed with deep wrinkles. Old age was strongly depicted in his whole figure, though he had hardly entered his fifty-fourth year.

Great was our disappointment when we discovered, that he had so totally forgot the French and German languages as not to be able to speak a single sentence, nor readily to comprehend any thing that was said to him in either of those languages. Thus were we unfortunately deprived of what we expected would have furnished a favourable opportunity of acquiring further information respecting this country. We also promised ourselves much satisfaction in hearing the history of this extraordinary man, which he might, perhaps, be induced to relate to strangers who could probably be serviceable to him, but who could not be supposed to take advantage from what he might say, to his prejudice.

The cause of his banishment remained a secret to every one in this country, but it was generally supposed he had been guilty of some atrocious offence; especially as several of the commanders of Kamtschatka have exerted their interest to get him recalled in the reign of the present empress: but, so far from getting him recalled, they were not able to obtain a change of his place of banishment. He assured us, that, for twenty years, he had not tasted a morsel of bread, nor had been allowed any kind of subsistence, but had lived, all that time, with the Kamtschadales, on what he had procured from the

chase by his own activity and toil. Afterwards a small pension was allowed him, and his situation has been rendered much less intolerable since Major Behm was appointed to the command. Being taken notice of by so respectable a character, who often invited him to become his guest, others were induced to follow his example. The Major had also occasioned his pension to be increased to a hundred roubles a-year, which is an ensign's pay in every other part of the empress's dominions, but in this province all the officers have double pay. Major Behm informed us that he had obtained permission for him to go to Okotsk, where he was to reside in future; but that, at present, he should leave him behind, as he might probably be useful to us as an interpreter on our return to the bay.

Orders having been given to the first lieutenants of both ships, that the rigging should be repaired as far as the late supply of stores would permit, we proceeded on our hunting party, conducted by the corporal of the Kamtschadales; but, previous to our looking out for game, we proceeded to the head of Behm's harbour, which is an inlet on the west side of the bay. This having been a favourite place of Major Behm's, we named it after that officer, though, by the natives, it is called Tareinska.

As we advanced towards this harbour, we saw the *Toion* of St Peter and St Paul in a canoe, having with him his wife and two children, and another inhabitant of Kamtschatka. He had just killed two seals on an island in the entrance of the harbour, and was returning home with them, as

well as with a large quantity of berries which he had gathered. The wind having veered to the southwest, in pursuance of his advice we now changed our route, and, instead of proceeding up the harbour, took a northerly course, towards a pool of water, at a small distance from the mouth of the river Paratounca, which was much frequented by the bears.

As soon as we had landed, the wind unfortunately veered to the eastward, and once more destroyed our hopes of meeting with any game, the Kamtschadales having often assured us that there was no probability of our finding any bears, as we were to the windward, those animals being possessed of extraordinary acuteness in scenting their pursuers, which, under such circumstances, enabled them to avoid danger. We therefore returned to the boat, and, having provided a tent for that purpose, passed the night upon the beach. The next day, being governed by the opinion of our guides, we crossed the bay, and proceeded to the head of Rakoweena harbour, where we secured our boats, and afterwards went on foot with all our baggage.

Having walked about five or six miles, we arrived at the sea-side, three miles north of the light-house head. From hence a continued narrow border of level ground, adjoining to the sea, extended itself towards Cheepoonskoi Noss as far as we could see. It is entirely covered with heath, and produces berries in great abundance, especially those which are called crow and partridge berries.

We were told that there was almost a certainty of findin a number of bears feeding upon these

berries, but, as the weather was showery, it was unfavourable to us. Accordingly, however, we pursued our course along the plain, and though several bears were seen at a distance, we could not by any means get within shot of them. This diversion was therefore changed to that of spearing salmon, which we saw in throngs, driving through through the surf into a small river. Here we could not help remarking the inferiority of the Kamtschadales, at this kind of fishing, to the natives of Oonalashka; neither were their instruments, though pointed with iron, near so well adapted to the purpose, nor fabricated with that neatness which those of the Americans were, though pointed only with bone. On asking the cause of this inferiority, we were informed by the corporal, who had long resided amongst the Americans, that formerly the natives of Kamtschatka used such darts and spears as those of the Americans, and, like theirs, headed and barbed with bone, and were as dexterous as the latter in the management of them. We could not sufficiently understand each other to discover the real cause of this change, but suppose it may be the effect of an imperfect state of improvement. Fortunately, however, the water afforded us a little provision; for ill success had not only attended us in the chase by land, but we had failed in our expectations of shooting wild fowl, after having almost depended upon a supply of them for our sub-sistence, and, on its failure, began to think [illegible] most time to return to our head-quarters.

The Kamtschadales who attended us a[illegible] discovered that our not meeting with gam[illegible] casioned by our going in too large a [illegible]

by the unavoidable noise that was the natural consequence of it. This judicious remark induced us to separate; captain King, Ivaskin, and the corporal, forming one party, and the other consisting of captain Gore and the rest of the company. We passed the night under our tent, and, on the morning of the 19th, set out by different routes, in order to take a kind of circuit round the country, and meet at St Peter and St Paul.

Captain King, and his party, took the course of the river, at whose mouth we had fished for the salmon; and, after being completely soaked with heavy rains the whole morning, they took shelter, about three in the afternoon, in some old *balagans*, which were the remains of a Kamtschadale village, without having seen a single bear in their long and tedious journey.

At first we seemed inclined to continue here all night, that we might resume the chase early in the morning; but, as the weather began to clear, and a fresh breeze sprung up from a quarter hostile to our designs, the Hospodin, whom former severities had rendered unable to endure fatigue, and who was now more particulary distressed from having his snuff-box exhausted of its contents, grew very importunate with us to return home. The old corporal was extremely unwilling to consent, alleging, that we were at a considerable distance from the
rbour, and that the badness of the way would
bly hinder us from completing our journey
night had overtaken us. Ivaskin's entreaties,
, at length prevailed, and the corporal con-
s by the side of several small lakes, which
numerous in the flat part of this coun-

try. They are from half a mile to two miles long, and generally about half a mile in breadth. The water in them is very clear and fresh, and they abound with red-coloured fish, not unlike a small salmon, both in shape and size. The margins of these lakes were usually covered with half-eaten fish, being fragments left by the bears, which occasioned a most intolerable stench. We frequently arrived at places which had just been quitted by the bears, but were never able to come within reach of them.

At night we reached the ships, after having been full twelve hours upon our legs. Poor Ivaskin seemed perfectly overcome with fatigue, and was probably the more sensibly affected by it for want of a supply of snuff; for almost at every step his hand sunk mechanically into his pocket, and instantly rose again with his huge empty box. Just as we arrived at the tent, the weather became exceedingly rough and wet, and we congratulated ourselves on our not having staid another day from our general rendezvous. The Hospodin's box was immediately replenished, and, regaling upon a good supper, we forgot the fatigues and disappointments of our journey.

The next day (Monday the 20th) we received the disagreeable intelligence, that our friend, the serjeant, had suffered corporal punishment, which had been inflicted on him by command of the old *Put-parouchick*. None of us could learn the cause of his displeasure; but it was supposed to have arisen from some little jealousy, which had been excited by our civility to the former. Imagining, however, that the offence, whatever it might be,

could not merit a chastisement so disgraceful, we were both sorry and angry at what had happened. The friendship and familiar terms on which we had lived with him, and the esteem we were known to entertain for him, made the affront appear personal to ourselves. For we had consulted the worthy Major Behm, who was likewise the serjeant's friend, how we could render him some service for the excellent order he had preserved in the *ostrog* during our stay, and for his extreme readiness to oblige us upon every occasion that presented itself. The major said a letter of recommendation to the governor-general would probably have a good effect; captain Clerke accordingly had given him one, which, together with his own representations, he fully expected would get the serjeant advanced in his profession.

We were unwilling to remonstrate on this subject till captain Shmaleff should arrive. Indeed, our very imperfect knowledge of the language would not permit us to enter into any discussion upon this business. But when we were next visited by the *Put-parouchick*, the coolness of our reception must fully have testified our chagrin.

On Wednesday, the 22d of September, being the anniversary of the coronation of George III. we fired twenty-one guns; and, in honour of the day, prepared as elegant a feast as our situation would allow of. The arrival of captain Shmaleff was announced the very moment we were sitting down to dinner. We were equally pleased and surprised at this intelligence. First, because he came so opportunely to take a share in the festivity of the day; and, in the next place, having

lately been informed that the effects of a severe illness had rendered him unequal to the journey, we had the satisfaction to hear that this had been merely an excuse; that, knowing we were distressed for tea, sugar, &c. he was hurt at the idea of coming empty-handed, and therefore had deferred his setting out, impatiently waiting for the arrival of a sloop from Okotsk; but hearing no intelligence of her, and fearing we should sail before he had visited us, he was resolved to prosecute the journey, though he had nothing to present to us but apologies for the poverty of Bolcheretsk.

He told us, at the same time, that the reason of our not having received the black cattle, which we had requested to be sent down, was, that the heavy rains at Verchnei had absolutely prevented their setting out. So much politeness and generosity demanded the best answer we were capable of making, and he was, the next day, saluted with eleven guns, on coming on board the Resolution: samples and specimens of our curiosities were then presented to him, to which captain Gore added a gold watch, and a fowling piece. He was entertained on board the Discovery next day, and on the 25th he returned to Bolcheretsk.

No entreaties could prevail on him to extend his visit, having, as he assured us, some expectations that the sub-governor-general would arrive in the sloop which he expected from Okotsk, as he was then on a tour through all the provinces of the governor-general of Jakutsk. Without any application from us, he re-instated the serjeant in his command, before his departure, having resolved to take the *Put-parouchick* with him. We also un-

derstood that he was much offended with him for punishing the serjeant, as there did not appear to be the slightest grounds for inflicting such chastisement.

Encouraged by the captain's great readiness to oblige us, we ventured to request a small favour for another inhabitant of Kamtschatka. It was to requite an honest old soldier, who kept a kind of open house for the inferior officers, both for them and the whole crew. The captain obligingly complied with our wishes, and dubbed him instantly a corporal; telling him, at the same time, to thank the English officers for his very great promotion.

It may not here be unnecessary to remark, that the lower class of officers in the Russian army have a greater pre-eminence above the private men than those in the British service can possibly conceive. It was, indeed, a matter of astonishment to us, to see a serjeant assume all the state, and exact as much homage from those beneath him, as though he had been a field officer. Besides, there are several gradations of rank amongst them, of which other countries are wholly ignorant, there being no less than four intermediate steps between a serjeant and private soldier; and many considerable advantages may probably arise from this system. Subordinate ranks in the sea-service are known to produce the most salutary effects, by creating emulation, and officers of superior rank are thereby enabled to bestow an adequate reward on almost every possible degree of merit.

The discipline of the Russian army, though so extremely remote from the seat of government, is

remarkable for its strictness and severity, not exempting even the commissioned officers. Imprisonment, and bread and water diet, is the punishment of the latter for inconsiderable offences. A good friend of ours, who was an ensign in this place, informed us, that the punishment he received for having been concerned in a drunken frolic, was three months imprisonment in the black-hole, with bread and water only for his subsistence; which so affected his whole nervous system, that he has never since enjoyed a sufficient flow of spirits to qualify him for a convivial meeting.

Captain King attended captain Shmaleff as far as the entrance of Awatska river, and having taken leave of him, embraced that opportunity of visiting the priest of Paratounca. He attended him to church on Sunday the 26th, when his whole congregation consisted of his own family, three men, and the same number of boys, who assisted in the singing, and the whole of the service was performed with great solemnity and devotion.

Though the church is built of wood, it is much superior to any building either in this town, or in that of St Peter and St Paul. Among the several paintings with which it is ornamented, are two pictures of St Peter and St Paul, which were presented by Beering, and which might vie with the first European performances in the intrinsic riches of its drapery, the principal parts of it being composed of thick plates of real solid silver, so fastened as to imitate the foldings of the robes which decorate the figures, and fixed upon the canvass.

Another hunting party was set on foot the next day, when captain King submitted himself to the direction of the parish-clerk, who had acquired great reputation as a bear-hunter. About sun-set they arrived at one of the larger lakes, where it was deemed necessary to conceal themselves as much as possible: this was easily effected among some long grass and brush-wood, of which there was great plenty near the water's edge. We had not been long in this situation, before our ears were agreeably saluted with the growling of bears, in almost every quarter round about us; and we soon had the pleasure of beholding one of them in the water, swimming in a direct course to where we lay concealed. At this time the moon shone, so as to afford a considerable light; and, as the animal advanced towards us, three of us fired at it, almost at the same instant. Immediately the beast turned short upon one side, and set up a most horrible noise, which was neither yelling, growling, nor roaring, but a very extraordinary mixture of the whole three.

We could easily perceive that the animal was severely wounded, and that it reached the bank with difficulty; whence it retreated to some thick bushes not far distant, still continuing to make that dreadful noise. The Kamtschadales supposed it to be mortally wounded, and that it could proceed no further, but judged it an act of imprudence to attempt to rouse it again immediately. It was then after nine o'clock, and as the night became overcast, and a change of weather was to be apprehended, we thought it advisable to return home, and wait till morning for the gratification of our curiosity; when

we accordingly repaired to the spot, and found the bear dead from the wounds it had received. It was a female, and larger than the ordinary size. But, as this account of our hunting party may convey a wrong idea of the method usually pursued in this sport, a few words may be necessary to be added on this subject.

The natives generally contrive to reach the ground, frequented by the bears, about sun-set. Their first business, when they arrive there, is to look out for their tracks, and to attend particularly to the freshest of them; always paying a regard to the situation with respect to concealment, and taking aim at the animal as it passes by, or as it advances or goes from them. These tracks are numerous between the woods and the lakes, and are often found among the long sedgy grass and brakes on the margin of the water. Having determined upon a convenient spot for concealment, the hunters fix their crutches on the ground, in which they rest their firelocks, pointing them in a proper direction. They afterwards kneel or lie down, as the circumstances of their situation may require; and, having their bear-spears in readiness by their side, wait the arrival of their game.

These precautions are extremely necessary, on many accounts, that the hunters may make sure of their mark: for the price of ammunition is so high at Kamtschatka, that the value of a bear will not purchase more of it than will load a musquet four or five times. It is much more material on another consideration, for, if the first shot should not render the animal incapable of pursuit, fatal consequences too frequently ensue. The enraged beast

makes immediately towards the place from whence the sound and smoke issue, and furiously attacks his adversaries. They have not sufficient time to reload their pieces, as the bear is seldom fired at till he comes within the distance of fifteen yards; therefore, if he should not happen to fall, they immediately prepare to receive him on their spears, their safety depending, in a great measure, on their giving him a mortal stab as he advances towards them. Should he parry the thrust, (which these animals are sometimes enabled to do, by the strength and agility of their paws) and break in upon his opponents, the conflict becomes dreadful, and it is seldom that the loss of a single life will satisfy the beast's revenge.

The business or diversion of bear-hunting is particularly dangerous at two seasons of the year; in the spring, when they first issue from their caves, after having subsisted the whole winter (as it is here positively asserted) solely on sucking their paws; and especially if the frost should continue to be severe, and the ice in the lakes is not broken up, as they cannot then have recourse to their customary and expected food. Thus becoming exceedingly famished, they grow fierce and savage in proportion, pursuing the inhabitants by the scent, and, prowling about at a distance from their usual tracks, dart upon them unawares. Under these circumstances, as the natives have no idea of shooting flying, or even running, or in any manner without resting their piece, they often fall a sacrifice to their rapacity. The time of their copulation is the other dangerous season to meet with them, and that is usually about this time of the year.

We have already mentioned a remarkable instance of natural affection in these animals. Many of a similar nature, and equally affecting, are frequently related by the Kamtschadales, who, from this circumstance, derive considerable advantage in hunting. They never presume to fire at a young bear if the dam is upon the spot; for, if the cub should happen to be killed, she becomes enraged to an immoderate degree, and, if she can only obtain a sight of the offender, she is sure to be revenged of him, or die in the attempt. On the other hand, if the mother should be shot, the cubs continue by her side after she has been a long time dead, exhibiting, by the most affecting gestures and motions, the most poignant affliction. The hunters, instead of commiserating their distresses, embrace these opportunities of destroying them. If the veracity of the Kamtschadales is to be depended on, the sagacity of the bears is as extraordinary as their natural affection.

Innumerable are the stories which they relate to this effect, One remarkable instance, however, we cannot avoid mentioning, as it is admitted among the natives as a well-attested fact. It is the stratagem they put in practice to catch the bareins, which run too swift for them to expect success in pursuing them. These animals herd together in great numbers, and their usual haunts are low grounds, at the feet of rocks and precipices, where they delight in browsing. The bear pursues them by the scent till he obtains a view of them, and then advances warily, keeping in a situation above them; at the same time concealing himself among the rocks as he approaches, till he is almost imme-

diately over them, and near enough to carry his purpose into execution. Then, with his paws, he pushes down large pieces of the rock amongst the herd below. If he perceives that he has succeeded in maiming any of the flock, he immediately pursues them, and, according to the injury the poor bareins have received, he either proves successful in overtaking them, or they escape by the rapidity of their flight.

The Kamtschadales acknowledge infinite obligations to the bears, for all the little progress they have hitherto made, as well in the sciences as the polite arts. They confess themselves indebted wholly to those animals for all their knowledge in physic and surgery; that, by observing what herbs they have applied to the wounds they have received, and what methods they have pursued when they were languid and out of order, they have acquired a knowledge of most of those simples which they have now recourse to, either as external or internal applications. But, the most singular circumstance of all is, that they admit the bears to be their dancing-masters; though the evidence of our own senses places this matter beyond all dispute, for, in the bear-dance of the Kamtschadales, every gesture and attitude peculiar to that animal was faithfully exhibited. All their other dances are similar to this in many particulars, and those attitudes are thought to come the nearest to perfection which most resemble the motions of the bear.

On the 28th of September, captain King returned to the ships, not a little pleased with his excursion, as it gave him an opportunity of seeing a part of the country, and of observing the actions

of the Kamtschadales when they were under no restraint, which evidently was not the case when they were in the company of the Russians.

Nothing worth mentioning occurred till the 30th, when captain Gore went to Paratounca, in order to have an escutcheon put up in the church, which had been prepared by Mr Webber. It had an inscription on it, mentioning captain Clerke's age and rank, and the nature of the expedition which he commanded at the time of his decease. To the tree, under which he was interred, a board was affixed with a similar inscription on it.

Captain Gore, before his departure, ordered captain King to get the ships out of the harbour, that they might be in readiness to sail. This, however, was prevented by a violent gale of wind on the 1st of October, which continued the whole day; but, on the 2d, both the vessels warped out of the harbour, and anchored in seven fathoms water, about a quarter of a mile from the *ostrog*. The day before we quitted the harbour, the cattle from Verchnei arrived; and, that the men might have the full enjoyment of this seasonable supply, by eating it whilst it was fresh, captain Gore determined to stay in the same station five or six days longer.

This time was far from being misapplied, for the pumps, sails, and rigging of each ship received an additional repair. Captain King, having obtained permission to use the copper belonging to the Resolution, and being supplied with molasses by captain Gore, was enabled to brew a sufficient quantity of beer to last the crew a fortnight, and to make ten additional puncheons of strong spruce

essence. This supply was the more acceptable, as our last cask of spirits was now serving out, except a small quantity reserved for cases of emergency.

As the 3d of October was the name-day of the Empress of Russia, we were perfectly inclined to show it every possible respect. The priest of Paratounca, Ivaskin, and the serjeant, were invited to dine with us; and an entertainment was prepared for the two Toions of Paratounca, and St Peter and St Paul, as well as for the inferior officers of the garrison, and the most respectable of the Kamtschadale inhabitants. All the other natives were invited to partake in common with the ships' companies, a pound of excellent beef being served out to every man, and the remainder of our spirits was made into grog, and distributed amongst them. Twenty-one guns were fired upon the occasion; and, considering we were in a very remote part of the Empress's dominions, the whole was conducted in a manner not unworthy so illustrious a character.

On the 5th of October we received a fresh supply of tea, sugar, and tobacco, from Bolcheretsk. Captain Shmaleff having met this present on his return, he sent a letter with it, informing us that the sloop from Okotsk had arrived in his absence, and that Madame Shmaleff had instantly dispatched a courier with these few presents, requesting our acceptance of them.

On the 6th and 7th of October the appearance of foul weather prevented our unmooring, but, on the 8th, we sailed towards the mouth of the bay, and all the boats were hoisted in; but our progress

was stopped by the wind veering to the south, which obliged us to drop anchor, the *ostrog* bearing north, at the distance of half a league. The wind blowing from the same quarter, and the weather being foggy all the forenoon on the 9th, we continued in our station.

At four in the afternoon of the same day we again unmoored; but, whilst we were raising our last anchor, we were informed that the drummer of marines had fled from the boat, which had just left the village, and that he had been lately seen with a Kamtschadale woman, to whom he was known to have been much attached, and who had frequently importuned him to stay behind. This man was entirely useless to us, having been rendered lame by a swelling in his knee; and, on that very account, captain King was the more unwilling to leave him behind, lest he should become a miserable burthen to himself, as well as to the Russians. He therefore applied to the serjeant to send parties of his men in pursuit of him; and, in the mean time, the sailors visited a well known haunt of his in the neighbourhood, where the drummer and his woman were found together. On the return of our deserter, we weighed anchor, and immediately followed the Resolution.

As we have now taken our leave of St Peter and St Paul, a particular account of Awatska Bay, and the adjoining coast, may not be unacceptable to the reader, as it is perhaps the safest, and most extensive harbour that has ever been discovered, and the only one, in this part of the world, that can admit vessels of considerable burthen. The term bay, properly speaking, is rather inapplicable

to a place so completely sheltered as Awatska; but when it is considered how loose and vague some navigators have been, in their denominations of certain situations of sea and land, as harbours, bays, roads, sounds, &c. we are not sufficiently warranted to exchange a popular name for one that may perhaps seem more consistent with propriety.

The entrance into Awatska Bay is in the latitude of 52° 51′ north, and the longitude of 158° 48′ east. It lies in the bight of another exterior bay, formed by Cape Gavareea to the south, and Cheepoonskoi Noss to the north. The latter of these head-lands bears from the former northeast by north, and is thirty-two leagues distant. From Cape Gavareea to the entrance of Awatska Bay, the coast takes a northerly direction, and extends about eleven leagues. It consists of a chain of ragged cliffs and rocks, and, in many parts, presents an appearance of bays or inlets; but, on a nearer view, low ground was seen that connected the head-lands.

From the entrance of Awatska Bay, Cheepoonskoi Noss bears east-northeast, distant seventeen leagues. The shore, on this side, is flat and low, with hills behind, gradually rising to a considerable height. The latitude of Cape Gavareea is 52° 21′.

This remarkable difference of the land on the sides of Awatska Bay, together with their different bearings, are very proper guides to steer for it, in coming from the southward; and when it is approached from the northward, Cheepoonskoi Noss becomes very conspicuous, it being a high projecting head-land, and is united to the continent by a

large extent of level ground, lower than the Noss. Whether viewed from the north or south, it presents the same appearance.

We have been rather particular in describing this coast, having experienced the want of such a description; for if we had possessed a tolerably good account of the form of the coast on both sides of Awatska Bay, we should, when we first visited it, have arrived there two days sooner than we did, and consequently have avoided part of the tempestuous weather which we experienced in plying off the mouth of the harbour. Besides, as the fogs are so prevalent in those seas, it often happens that an observation for ascertaining the latitude cannot be taken. It should also be considered, that land makes a very deceptive appearance when covered with snow, or when viewed through an hazy atmosphere; both which circumstances prevail here for a considerable part of the year, and render it necessary for every mariner to be acquainted with as many discriminating objects as possible.

If the weather should happen to be sufficiently clear to admit a view of the mountains, both on the coast and its neighbourhood, the situation of Awatska Bay may be precisely known, by the two high mountains to the south of it. That nearest the bay is in the form of a sugar-loaf; the other, which is more inland, is flat at the top, and not quite so high. There are three very conspicuous mountains to the north of the bay: that furthest to the west appears to be the highest; the next, which is a volcano mountain, may readily be known by the smoke issuing from its top. The third is the most northerly, and might, with some pro-

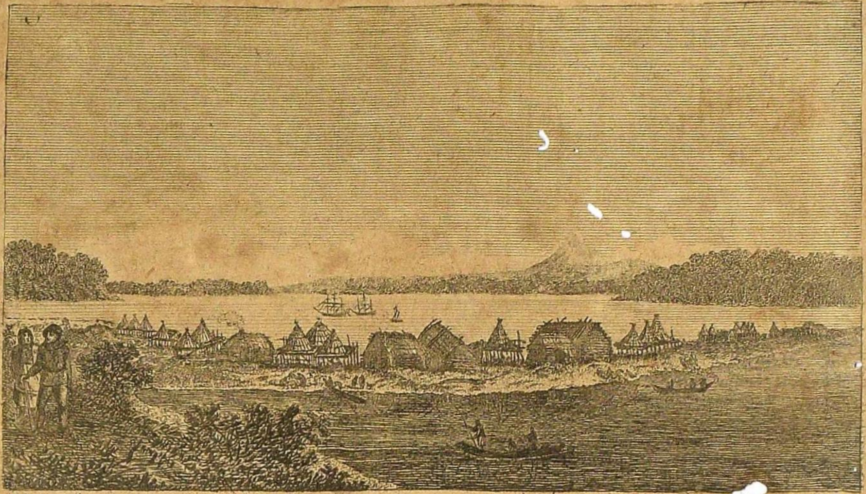
priety, be called a cluster of mountains, as it presents several flat tops to our view.

When we get within the capes, and into the outward bay, a light-house, on a perpendicular headland, will point out the entrance of the bay of Awatska to the north. Many sunken rocks lie to the eastward of this head-land, stretching two or three miles into the sea, and which, with a moderate sea or swell, will always show themselves. A small round island lies four miles to the south of the entrance, principally composed of high pointed rocks, one of which is strikingly remarkable, as being larger and more perpendicular than the rest.

The entrance into the bay is, at first, about three miles wide, and one mile and a half in the narrowest part; the length is four miles, in a north-northwest direction. A noble bason, of about twenty-five miles in circumference, lies within the mouth; in which are the harbours of Rakoweena, to the east, Tarcinska, to the west, and St Peter and St Paul to the north.

The breadth of Tarcinska harbour is three miles, and the length about twelve. A narrow neck of land separates it from the sea at the bottom, and it stretches to the east-southeast. As far as we surveyed, we never found less than seven fathoms water, but the ice hindered us from getting to the bottom of the harbour.

The entrance of the harbour of Rakoweena is impeded by a shoal in the middle of the channel, which, in general, makes it necessary to warp in, unless there should happen to be a leading wind. Were it not for this circumstance, this harbour would be preferable to the other two. Its breadth



J. Webber Del.t T. Hill

A VIEW OF THE TOWN AND HARBOUR OF St PETER AND St PAUL [illegible]

is from one mile to half a mile, and its length three miles, running in a southeast and easterly direction. It is from thirteen to three fathoms in depth.

One of the most convenient little harbours we have seen, is St Peter and St Paul. Half a dozen ships may be commodiously moored in it, head and stern; and it is, in every respect, convenient for giving them any kind of repairs. The south side of this harbour is formed by a low, narrow, sandy neck, on which the *ostrog* is built. The mid-channel is only two hundred and seventy feet across, in which there is six fathoms and an half water; the deepest water within is seven fathoms, and all over a muddy bottom. Some inconvenience was, however, occasioned by the roughness of the ground, which often broke the messenger, and made it troublesome to get the anchors up. At the head of this harbour there is a watering place.

There is a shoal lying off the eastern harbour, and a spit within the entrance, stretching from the southwest shore, having only three fathoms water over it. To steer clear of the latter, a small island, or rather a large detached rock, on the west shore of the entrance, must be shut in with the land to the south of it. In order to steer clear of the former, the three needle rocks, near the light-house head, on the east shore of the entrance, must be kept open with the head-lands to the northward of the first small bending on the east side of the entrance. In entering the harbour of St Peter and St Paul, and approaching the village, it is very necessary to keep near the eastern shore, to avoid a

spit which stretches from the head-land to the southwest of the *ostrog*.

The time-keeper on board the Resolution, which was exactly copied from Mr Harrison's by Mr Kendal, stopped on the 27th of April, a few days before our first arrival in Awatska Bay. During the voyage, it had always been carefully attended to, not having been trusted, even for a moment, into any other hands than those of captain Cook and captain King. No accident, therefore, could have happened to it, to which its stopping could be attributed; nor could it proceed from the operations of intense cold, the thermometer being but very little below the freezing point.

When the failure of the time-piece was first discovered, the captains Clerke and King consulted what measures they should pursue; whether they should suffer it to remain in a useless state, for the satisfaction of the curious at home, where it would certainly be examined by proper judges, or submit it to the inspection of a seaman on board, who had been regularly bred a watchmaker in London, and who had given many satisfactory proofs of his skill in that profession, in repairing several watches upon the voyage.

Having experienced the accuracy of this time-piece, we were extremely unwilling to be deprived of its advantages during the remaining part of the voyage; and that object appeared to us of more importance than the small degree of probability of deriving any material knowledge with regard to its mechanism, by deferring the inspection of it till our return. Besides, it should be considered, that the watch had already been sufficiently tried to as-

certain its utility, as well in the former voyage as during the three years we had now had it on board the Resolution. Therefore, on the first clear day after we arrived in Awatska Bay, the time-piece was opened in the presence of captain Clerke and captain King. No part of the watch appeared to be broken; but, as the watchmaker was not able to make it go, he took off the cock and balance, and cleaned the pivot-holes, which were extremely foul. The other parts of the work were also dirty. He then took off the dial-plate, and found a piece of dirt between two teeth of the wheel which carries the second hand, and attributed its stopping principally to this cause. After putting the work together, and oiling it very sparingly, the watch seemed to go with freedom and regularity.

Captain King having orders to go the next day to Bolcheretsk, the time-keeper was left with Mr Bailey, in order to get its rate by comparing it with his watch and clock, who informed him, on his return, that it had gone very regularly for some days, never losing more than seventeen seconds a-day, and afterwards stopped again. Upon its being a second time opened, its stopping seemed to be occasioned by its having been badly put together on the first opening of it. When it was again adjusted it gained above a minute a-day, and the watchmaker broke the balance-spring in attempting to alter that and the regulator. He then made a new spring, but the watch went so irregularly afterwards that we could make no further use of it. The honest man was as much chagrined as we were at our ill success, which we were convinced was not so much owing to his want of skill, as to

the miserable tools he had to work with, and the stiffness his hands had contracted from his occupation as a seaman.

At the full and change of the moon, it was high-water at thirty-six minutes after four; and five feet eight inches was the greatest rise. The tides were regular every twelve hours.

The peninsula of Kamtschatka is situate on the eastern coast of Asia, and extends from 52° to 61° north latitude; the longitude of its extremity to the south being 156° 45′ east. The isthmus, joining it to the continent on the north, lies between the gulphs of Olutorsk and Penshinsk. Its extremity to the south, is Cape Lopatka; so called from its resembling the blade-bone of a man, which is the signification of that word. The whole peninsula is somewhat in the form of a shoe; and its greatest breadth is two hundred and thirty-six computed miles, being from the mouth of the river Tigil to that of the river Kamtschatka; and towards each extremity it gradually becomes narrower.

On the north, it is bounded by the country of the Koriacks; by the north Pacific Ocean to the south and east; and by the sea of Okotsk to the west. A chain of high mountains, from north to south, extend the whole length of the peninsula, and almost equally divide it; whence several rivers take their rise, and make their course into the Pacific Ocean, and the sea of Okotsk.

The three principal rivers are the Bolchoireka, or great river; the river Kamtschatka; and the river Awatska. The first discharges itself into the sea of Okotsk, and is navigable for the Russian galliots five leagues from its mouth or within three

leagues of Bolcheretsk which is situate at the conflux of the two rivers, Goltsoffka and the Bistraia, which are here lost in the Bolchoireka. The source of the Bistraia, which is no inconsiderable river, is derived from the same fountain as the river Kamtschatka, but takes a quite contrary course; by which means the Kamtschadales are enabled to transport their goods by water, almost across the peninsula. The river Kamtschatka continues about three hundred miles in the direction of south to north; and, after winding round to the eastward, is received by the ocean, a little to the southward of Kamtschatskoi Noss. To the northwest of the mouth of Kamtschatka, lies the great lake Nerpitsch; from *nerpi*, a seal; that lake abounding with those animals. A fort, called Nishnei Kamtschatka *ostrog*, is situate about twenty miles up the river, where an hospital and barracks have been built by the Russians; and this place, we understood, is now become the principal mart in the country.

The source of the Awatska river is from the mountains between the Bolchoireka and the Bistraia. After running two hundred miles, from northwest to southeast, it falls into Awatska Bay. The Tigil is likewise a considerable river; it rises amidst some high mountains, parallel with Kamtschatskoi Noss, and empties itself into the sea of Okotsk. The other rivers of this peninsula, which are very numerous, are too inconsiderable to be particularly mentioned.

If we may judge of its soil from its vegetable productions, it appears to be barren in the extreme. Neither about the bay, nor in our journey to Bol-

cheretsk, nor in any of our hunting expeditions, did we ever perceive the smallest spot of ground, that had the appearance of a good green turf, or that seemed capable of improvement by cultivation. Stunted trees were scattered over the whole face of the country, whose bottoms were mossy, with a mixture of low heath; the whole resembling Newfoundland in a most striking degree.

It must be admitted, however, that we saw at Paratounca three or four stacks of most excellent hay; and Major Behm assured us, that the banks of the Kamtschatka and the Bistraia, as well as many other parts of the peninsula, produce a quantity of grass of great strength and height, which is mowed twice in every summer; and that the hay is particularly adapted to the fattening of cattle, being of a very succulent quality. It appeared, indeed, from the size and fatness of the thirty-six which we received from the Verchnei *ostrog*, that they must have had the advantage of good grass and hay; for when we were supplied with the first twenty, it was just the close of the winter, the snow still remaining on the ground; and probably they had fed only on hay for the seven preceding months. This agrees with Krascheninicoff's account, who relates, that the country which borders on the river Kamtschatka is much superior, in point of fertility, to that of either the north or south. Repeated experiments, he says, have been made in different quarters near this river in the culture of barley, rye, and oats, which seldom failed of success; and he supposes, that wheat would grow in many parts, especially near the source of the Bistraia and Kamtschatka, as well as in most countries situate in the

same latitude. The fertility of this part of the country may, perhaps, be occasioned by its lying in the widest part of the peninsula, and consequently, at the farthest distance from the sea on each side: as chilling fogs and drizzling weather generally prevail along the coast, and cannot fail to render the parts adjacent incapable of improvement by agriculture.

The severity of the climate, it may naturally be supposed, must be in proportion to the sterility of the soil, of which it is perhaps the cause. We first saw this country in the beginning of May 1779, when it was covered with snow, from six to eight feet in depth. On the 6th of May we had snow, with the wind from northeast. At noon, on the 8th, the thermometer stood at 32°; and some of our men were on that day ordered on shore, to endeavour to cut wood; but their attempts were fruitless, the snow still lying so deep upon the ground. Nor could they proceed in this necessary business, though the party consisted of stout and able fellows, till the 12th, when the thaw gradually advanced. In some places, the sides of the hills were now free from snow; and it was principally melted on the low land by the beginning of June. On the 15th of that month, we sailed out of the harbour: during our stay, the winds generally blew from the eastward, and the southeast was the most prevalent.

On the 24th of August, when we returned, the foliage of the trees, and vegetation in general, appeared to be in the height of perfection. The weather, during the remainder of that month, and the whole of September, was very changeable, but not

severe. At the beginning of the month, the winds were, in general, easterly; but afterwards got round to the west. The thermometer's greatest height was 65°, the lowest 40°. The greatest height of the barometer was 30°, the lowest 29° 3′. So that all the month of September a moderate degree of temperature prevailed. But, when October began, the new-fallen snow again covered the tops of the hills, and the wind continued westerly.

In computing the seasons here, spring should certainly be omitted. Summer may be said to extend from the middle of June till the middle of September; October may be considered as autumn; from which period to the middle of June, it is all dreary winter.

The climate in the country adjacent to the river Kamtschatka, is said to be as serene and temperate as in many parts of Siberia under the same latitude. This, probably, originates from the same causes, to which the fertility of the soil in that part of the country has been already attributed. The sterility of the ground, however, is not the only consequence of the unfavourable temperature of the climate. The inhabitants are sometimes prevented, by the uncertainty of the summer season, from providing a sufficient stock of dried fish for their food in the winter; and the moisture of the air occasions worms to breed in them, which frequently destroy, or spoil, the greatest part.

We had neither thunder nor lightning during our stay at Kamtschatka, excepting the night of the eruption of the volcano; and we were told by the inhabitants, that they were not often troubled with either, and never but in a slight degree. The severity of winter, and the dreadful hurricanes of wind

and snow which attend it, oblige the natives to retire to their subterraneous habitations, both for their security aad warmth. We were informed by Major Behm, that the inclemency of the winter of 1779 was so great, that all intercourse was stopped between the inhabitants for several weeks; no one daring to stir from one habitation to another, so fearful were they of being frost-bitten. The extreme rigour of the climate, in so low a latitude, may be attributed to its being situate to the east of an immense uncultivated country, and to the prevalence of the westerly winds over so extensive and cold a continent. The impetuosity of the winds may be attributed to the subterraneous fires, and sulphureous exhalations.

Volcanoes are numerous in this peninsula; only three of which have lately been subject to eruptions. That in the neighbourhood of Awatska we have already mentioned; and there are others equally remarkable, according to Krascheninicoff.

The volcano of Tolbatchick is situate between the river Kamtschatka and Tolbatchick, on a neck of land. The eruptions proceed from the summit of a high mountain, which terminates in pointed rocks. A whirlwind of flames issued from it in the beginning of 1739, which reduced the forests of the neighbouring mountains to ashes. A cloud of smoke succeeded this, which spread darkness over the whole country, but was dissipated by a shower of cinders, which covered the earth to the extent of thirty miles. Krascheninikoff, who was then travelling frnm Bolchoireka to the Kamtschatka *ostrog*, and not far from the mountain, says, the eruption was preceded by an alarming sound in the woods,

which, he thought, portended some dreadful storm or hurricane; till three successive shocks of an earthquake, with only a minute's interval between each, fully convinced him of its real cause; but that he was hindered, by the falling of the cinders, from approaching nearer the mountain, or from proceeding on his journey.

On the top of the mountain of Kamtschatka, supposed to be by far the highest in the peninsula, is the third volcano. A thick smoke incessantly ascends from its summit, and it often has eruptions of the most dreadful kind; some of which were fresh in the memories of the natives, and were frequently spoken of.

Springs of hot water are said to abound in this country. We have only that at Natcheekin *ostrog*, which has already been described. Several others are mentioned by Kracheninicoff, who also takes notice of two pits or wells, at the bottom of which, the water boils with great impetuosity; a dreadful noise issuing from them at the same time, and so thick a vapour, that objects cannot be discerned through it.

Among the principal trees which fell under our notice, are the birch, the poplar, the alder, several species of the willow, and two sorts of dwarfish cedars. One of these sorts grows upon the coast, seldom exceeding two feet in height, and creeping upon the ground. Of this our essence for beer was made, and proved to be proper for the purpose: the other, which grows much higher, is found on the mountains, and bears a kind of nut or apple. The old *Toion* at St Peter and St Paul informed us,

J. Webber Del.^t

A VIEW AT BOLCHERETZKOI, IN KAMTSCHATKA.

T. Hill Sc.

that when Beering lay in that harbour, he taught them the use of the decoction of these cedars; which proved an admirable remedy for the scurvy; but either from the scarcity of sugar, or some other cause, it is no longer used amongst them.

Of the birch, which appears to be the most common tree, we remarked three sorts. Two of them were large, and fit for timber, and differed from each other only in the colour and texture of the bark. The third is of a dwarfish kind. The natives apply this tree to a variety of uses. When tapped, it yields a liquor in great abundance, which they drink without mixture, or any kind of preparation, as we frequently observed in our journey to Bolcheretsk. We drank some of it ourselves, and found it pleasant and refreshing, though somewhat purging. They convert the bark into vessels for their domestic purposes; and, from the wood of this tree, are made their sledges and canoes. Not only the birch, but every other kind of tree in the neighbourhood of the bay were stunted, and very small; the natives are therefore obliged to go to a considerable distance up the country to get wood of a proper size for their canoes, their *balagans*, and many other purposes.

Krascheninikoff also mentions the larch, a tree which grows only on the banks of the river Kamtschatka, and those which it receives. He also says, there are firs near the river Berezowa. Likewise the service-tree, and two species of the white thorn.

This peninsula produces great abundance of the shrub kind, as mountain-ash, junipers, raspberry bushes, and wild rose-trees. Also a variety of

berries, as partridge-berries, blue-berries, black-berries, cran-berries, and crow-berries. These are gathered at proper seasons, and preserved by mashing them into a thick jam. They constitute a considerable part of their winter provisions, serving as a general sauce to their dried fish. They also eat them in puddings, and in various other modes, and make decoctions of them for their common beverage.

We found great quantities of wholesome vegetables in a wild state, such as chervil, garlic, onions, angelic, and wild cellery. We also met with some excellent turnips, and turnip-radishes, upon a few spots of ground in the valleys. This was the utmost extent of their garden cultivation; but, it is probable, that many of the hardy sorts of vegetables will thrive here, (particularly those whose roots descend) as carrots, parsnips, &c. Major Behm told us, that many other sorts of kitchen vegetables had been tried, but without effect; that those of the cabbage or lettuce kind would not head; and that, though beans and pease would grow vigorously, and flower and pod, yet the pods would never fill. He also told us, that in experiments he made in different sorts of farinaceous grain, a strong high blade sprung up, and even produced ears, but the latter never yielded flour.

This account of vegetables only relates to such parts of the country as fell within our observation; near the river Kamtschatka, where, as we have already observed, both the soil and climate is the best in the peninsula, garden culture is attended to, and perhaps with success; for, with the second drove of cattle which we received from Verchnei, we

also received a present of cucumbers, cellery, some very large turnips, and other garden vegetables.

Two plants are produced in this peninsula which deserve particular attention. The first is called *sarana* by the natives, and *Lilium Kamtskatiense flore atro rubente*, by botanists. The stem grows to the height of about five inches, and is not larger than that of a tulip; towards the bottom it is of a purple colour, and green higher up. Two tier of leaves issue from it, of an oval figure, the lower consisting of three leaves and the uppermost of four. A single flower, of a dark red colour, which resembles that of the narcissus in shape, grows from the top of the stalk. It has a bulbous root, like that of garlic, and, like that, has several cloves hanging together. The plant grows wild, and in great quantities: about the beginning of August many women are employed in collecting the roots, which, after being dried in the sun, are preserved for use. When we arrived the second time it was at the conclusion of this harvest, which we understood had fallen short of its usual produce. It is a maxim with the Kamtschadales, that Providence never deserts them, for the seasons that are prejudicial to the *sarana* are always favourable for fishing; and, on the contrary, an unsuccessful fishing month is always amply compensated by an exuberant *sarana* harvest. This article is variously employed in cookery. When roasted in embers it is a better substitute for bread than any thing the country produces. When baked in an oven, and pounded, it supplies the place of flour and meal, and is mixed in all their soups, and many of their other dishes. It is extremely nourishing, has a

pleasant bitter flavour, and may be eaten daily without cloying. We partook of these roots, boiled in the manner of potatoes, and found them very wholesome and agreeable. This plant is also produced at Oonalashka, where the roots of it, in like manner, constitute a considerable part of their food.

Sweet Grass is the name of the other plant alluded to; the botanical description of which is, *Heracleum Sibericum foliis pinnatis, foliolis quinis, intermediis sessilibus, corollulis uniformibus.* HORT. UPSAL. 65. It was in the month of May that we took particular notice of it, when it was about eighteen inches in height, strongly resembled sedge, and was covered with a kind of white down, not unlike the hoar-frost hanging upon it, and which might easily be rubbed off. The taste of it is as sweet as that of sugar, though very hot and pungent. It has a hollow stalk, which consists of three or four joints, with large leaves issuing from each. When this plant attains its full growth it is about six feet in height. This plant was formerly a principal ingredient in cookery, amongst the Kamtschadales, but, since the country has been in the possession of the Russians, it has been chiefly appropriated to the purpose of distillation. It is gathered, prepared and distilled, in the following manner. Having cut the stalks which have leaves growing on them, and scraped the downy substance from their surface, they are placed in small heaps till they begin to heat and smell. When dry, they are put into sacks of matting, where they remain a few days, and are then gradually covered over with a sweet saccharine powder, which exsudes

from the hollow of the stalk. Only a quarter of a pound of powder is obtained from thirty-six pounds of the plant in this state. The women who conduct this business find it necessary to defend their hands with gloves, whilst they are scraping the stalks, the rind being of so acrid a quality as even to ulcerate the part it touches.

In this state the spirit is drawn from the plant by the following process. Bundles of it are steeped in hot water, and its fermentation promoted in a small vessel, with berries of the *gimolost*, or of the *golubitsa;* care being taken to close the mouth of the vessel, and to keep it in a warm place whilst it continues to ferment, which is often to so violent a degree as to agitate the vessel which contains it, and occasion a considerable noise. When this first liquor is drawn off, more hot water is poured on, and a second made in the same manner. Both liquor and herbs are then put into a copper still, and the spirit is drawn off in the usual method. The liquor, thus prepared, is called by the natives *raka*, and has the strength of brandy. Seventy-two pounds of the plant generally produce twenty-five pints of *raka*. According to Steller, the spirit distilled from this plant *unscraped* is very pernicious to health, and produces sudden nervous disorders.

Krascheninicoff mentions several other plants from which decoctions are prepared, and which, when properly intermingled with their fish, make palatable dishes. Such is the *kipri*, with which a pleasant beverage is brewed; and, when this plant and the *sweet-herb* are boiled together, in the proportion of one to five of the latter, and properly fermented, a strong and excellent vinegar is obtained.

The leaves are substituted for tea, and the pith, when dried, is introduced in many of their dishes. He also mentions the *morkovai*, which is not unlike angelic; the *kotkorica*, the root of which is eaten green or dried; the *ikoum*, the *utchichlei*, and several others.

Before the Kamtschadales were acquainted with fire arms, it is said, they poisoned their spears and arrows with a juice extracted from the root of the zgate, and that death was inevitable to every animal who had received a wound from them. The Tschutski are now reported to use the same drug, and for the very same purpose.

The materials of all the manufacturers of Kamtschatka, according to Krascheninicoff, are furnished by three plants. One of them is the *triticum radice perenni spiculis binis lanuginosis*, which is exceedingly plenty along the coast. A strong kind of matting is fabricated from the straw of this grass, which is used to cover their floors, as well as for bed-clothes, curtains, sacks, and many other domestic purposes. Little bags and baskets are also made of the same materials, and are applied to various uses.

The *bolotnaia* grows in the marshes, and resembles *cyperoides*. It is gathered in the autumn, and is carded in the same manner as wool, with an instrument made of the bones of the sea-swallow. With this manufacture their new-born infants are swathed, and it is used for a covering next the skin after they cease to be infants. A kind of wadding is also formed of it, which is used to give additional warmth to different parts of their clothing.

A vulgar well-known plant remains to be taken notice of, as being more essential to their subsistence than all which have been mentioned. It is the nettle, which, as neither hemp nor flax are produced in Kamtschatka, supplies materials for their fishing nets, and on which their existence principally depends. For this purpose nettles are usually cut down in August, and, after being hung in bundles under their balagans the remainder of the summer, they are manufactured like hemp. It is then spun into thread with their fingers, and twisted round a spindle; after which several threads may be twined together, if the purposes for which it is designed requires it.

Many parts of this peninsula would probably admit of such cultivation as might contribute to the comfort and convenience of the inhabitants; yet, the number of wild animals it produces, must always be considered as its real riches, and no labour can be so productive of advantages as what is employed upon their furrieries. And, next to these, the animals that supply them are to be considered. These are the fox, the *zibeline*, or sable; the stoat, or *ermine*, the *isatis*, or arctic fox; the earless marmot, the varying hare, the weasel, the glutton, or *wolverene*, the wild sheep, rein-deer, wolves, dogs.

The most general object of the chase are foxes, with which this country abounds, and among which are a variety of colours. The most common species is the same as the European, but their colours are more vivid and shining. Some are of a dark chesnut, others have dark-coloured stripes; the bellies of some are black, when the other part of the body

is of a light chesnut. Some are black, others of a dark brown, others of a stone-colour, and some few are entirely white; the last, however, are very scarce. The quality of their fur is much superior to that of the same animals in Siberia or America. Many artifices are put in practice by the hunters to destroy them. Traps of various kinds are prepared; some to fall upon them, others to secure them by the feet, and others to catch them by the head. These are the most common methods of taking them; but they have many ingenious contrivances for catching them in nets. Poisoned baits are also used, the *nux vomica* being generally employed for that purpose. Still, however, the animal preserves his character for craftiness and cunning, in all climates, and upon all occasions.

Before the Kamtschadales had any knowledge of the Russians, who instructed them in the use of fire arms, they carried bows and arrows to the chase; but, since that period, almost every man amongst them is provided with a rifle-barrel gun; and, though he cannot use it with any extraordinary dexterity, he readily acknowledges its superiority to the former instruments.

The Kamtschatka sables are much larger than those of Siberia, and their fur is thicker and brighter; but those in the neighbourhood of the rivers Olekma and Vitime are of a finer black. The sables of the Tigil and Ouka are said to be the best in Kamtschatka, a pair of these being frequently sold for five pounds sterling. The worst are found in the southern extremity.

A rifle-barrel gun, of a very small bore, a net, and a few bricks, are the whole apparatus of the

sable hunters. With the first, they sometimes shoot them, when they are seen on the trees; the net is used in surrounding the hollow trees, in which they usually take refuge when pursued; and the bricks are put hot into the cavities, in order to drive them out with the smoke.

For an account of the *isatis*, or arctic fox, we must refer the reader to Mr Pennant's Arctic Zoology; the skin of this animal is of little value. The varying hare is neglected on that account. They are very numerous, and always become perfectly white during the winter. In the beginning of May we observed several of this colour, but they were so extremely shy, as not to suffer us to come within gun-shot.

The earless marmot, or mountain rat, is a beautiful creature, much smaller than a squirrel; and, like that animal, feeds upon roots and berries; sitting upon its hind legs whilst he eats, and holding the food to its mouth with the paws. Its skin is in high estimation among the Kamtschadales; being warm, light, and of a bright shining hue. Like the plumage of some birds, when it is viewed in different lights, it appears to be of various colours.

The *ermine*, or stoat, is little regarded here, and consequently not much attended to by the hunters, its fur being of a very ordinary kind. We observed several of these little creatures running about, and we purchased some of their skins, which were of a dirty yellow towards the belly, and the other parts were of a cloudy white. The weasel is also neglected, and on the same account.

The skin of the *wolverene*, or glutton, on the contrary, is in the highest repute; a Kamtschadale

looking upon himself as most splendidly attired, when a small quantity of this fur appears upon his garment. The women embellish their hair with its white parts, which is considered as the most superlative piece of finery. In short, a superstitious opinion obtains amongst them, that the angels are clad with the skins of those animals. This creature, it is said, may easily be tamed, and instructed in a variety of entertaining tricks.

All the bears which we had an opportunity of seeing, were of a dun brown colour; they generally appear in a company of four or five together; and are frequently seen in the season when the fish quit the sea, and push, in great quantities, up the rivers. Fish is indeed their principal food. In the winter months they are seldom visible. Of the skins of bears, warm mattresses and coverings for beds are made; together with comfortable bonnets, and gloves, and harness for the sledges. The flesh, especially the fat, is held in great estimation.

The wolves appear only in the water, when they are said to prowl about in large companies in pursuit of prey.

Rein-deer, both wild and tame, are found in many parts of the peninsula, but none in the neighbourhood of Awatska. It is remarkable, that the rein-deer have not been used, in this nation, for the purposes of carriage, as they are by their neighbours to the north and east. The demands of the natives, in their present state, are indeed sufficiently supplied by their dogs; and the breed of Russian horses will probably supply any future necessities of the country. But, as the use of dogs, in a

great degree, precludes them from the advantage of rearing other domestic animals, it appears very extraordinary that they should not have preferred an animal so much more powerful and gentle.

The wild mountain sheep, or *argali*, is in great plenty here; an animal unknown in Europe, except in Corsica and Sardinia. Its skin resembles that of the deer, but it nearer approaches the goat in its gait and general appearance. Its head is adorned with two large twisted horns, which, when the animal is at full growth, sometimes weigh from twenty-five to thirty pounds; and are rested on the creature's back when it is running. These animals are remarkably swift and active; frequent only the most craggy and mountainous parts, and traverse the steepest rocks with an astonishing agility. Of their horns, spoons, cups, and platters, are fabricated by the natives, who often have one of the latter hanging to a belt, serving them to drink out of when on their hunting expeditions. This is a gregarious animal. It is extremely beautiful, and its flesh is sweet and delicately flavoured.

The dogs of this country, as already observed, resemble the Pomeranian in mean and figure; but they are larger, and the hair is considerably coarser. Their colours are various, but that which most prevails is a light dun, or a pale dirty yellow. The poor animals are all turned loose about the latter end of May, and are obliged to shift for themselves till the ensuing winter; but never fail to return to their respective homes, when the snow begins to make its appearance. In the winter, their food consists wholly of the head, back-bones, and entrails of salmon, which are preserved and dried for

that purpose; and, even with this food, they are very scantily supplied. The dogs must certainly be very numerous, no less than five being yoked to a single sledge, and only one person carried in each sledge. In our journey to Bolcheretsk, we had occasion for one hundred and thirty-nine, at the two stages of Karatchin and Natcheekin. It is observable too, that bitches are never employed in this business, nor dogs that have been castrated. The whelps are trained to the draft, by being fastened to stakes with leathern thongs, which are elastic, and having their food placed beyond their reach; and thus by continually pulling and labouring to obtain a repast, they acquire strength and a habit of drawing; both of which are essentially necessary for their destined occupation.

Almost every kind of northern sea-fowl frequent the coast and bays of Kamtschatka; and, among others, the sea-eagles, but not in so great plenty as at Oonalashka. The inland rivers are plentifully stored with various species of wild ducks; one of which, called by the natives *aan-gitche*, has a most beautiful plumage. Its cry is equally singular and agreeable.

Another species is called the mountain duck, which, according to Steller, is peculiar to Kamtschatka. The plumage of the drake is singularly beautiful. A variety of other water-fowl were seen, which, from their magnitude, appeared to be of the wild goose kind.

We observed, in passing through the woods, some eagles of a progidious size, but of what species we could not possibly determine. There are said to be three different kinds. The first is the

black eagle, with a white head, tail, and legs; the eaglets of which are perfectly white. The second is improperly called the white eagle, though, in reality, it is of a light gray. The third is the stone-coloured eagle, which is a very common sort. There are great numbers of the hawk, falcon, and bustard kind in this peninsula.

Woodcocks, snipes, and grouse, are also found here. Swans are very numerous, and generally make a part of the repast at all public entertainments. The vast abundance of wild fowl in this country was sufficiently manifest from the many presents we received, consisting frequently of twenty brace at a time.

We saw no amphibious animals on the coast, except seals, which were extremely plenty about the bay of Awatska. The others were, at that time, pursuing the salmon that were ascending the rivers in large shoals. Some of them, it is said, follow the fish into fresh water, and frequent all the lakes which have a communication with the sea.

The sea-otters found here, and those which we met with at Nootka Sound, are exactly the same; and have already been particularly described. They were formerly in great abundance here; but, since the Russians have opened a trade with the Chinese for their skins, where they bear a price superior to any other kind of fur, the hunters have been induced to be so indefatigable in the pursuit of them, that very few remain in the country. They are still found amongst the Kurile islands, though the number is inconsiderable; but they are superior in quality to those of Kamtschatka or Nootka Sound. It is said, that hardly a sea-otter is now to be found

either on Mednoi or Beering's Island; though Muller informs us, that they were exceedingly plentiful in his time.

A great variety of amphibious animals are mentioned by the Russian voyagers as frequenters of these coasts; but, as we saw no other kinds, this was probably the season of their migration.

Fish is certainly the staple article of food among the inhabitants of this peninsula; who cannot possibly derive any considerable part of their sustenance either from agriculture or cattle. The soil, indeed, affords some wholesome roots, and every part of the country produces great quantities of berries; but these alone could not possibly support the inhabitants; though they are extremely salutary, as being proper correctives of the putrescent quality of their principal diet, dried fish. In short, fish may be here called the staff of life, with more propriety than bread in any other country; for neither the inhabitants, nor the domestic animals of the canine species, could possibly exist without it.

Whales are frequently seen in this country, and, when taken, serve for a variety of uses. Of the skins, the inhabitants make the soles of their shoes, and belts and straps for many other purposes. The flesh is eaten, and the fat is preserved for culinary uses, and feeding their lamps. The whiskers are highly serviceable for sewing the seems of the canoes; nets are also made of them of the larger kind of fish, and they shoe their sledges with the under-jaw bones. Knives are formed from many of their bones; and the chains, which fasten the dogs together, were formerly made of the same materials, though iron ones are now generally used. After

cleaning their intestines, drying them, and blowing them like bladders, they deposit their oil and grease in them; and they make excellent snares of their nerves and veins; in short, there is no part of the whale that is not useful in this peninsula.

We caught abundance of fine flat-fish, trout, and herrings, from about the middle of May till the 24th of June, the time of our departure. At one haul, on the 15th of May, we dragged out upwards of three hundred flat-fish, besides a considerable quantity of sea-trout. The former are firm and well-flavoured, studded with prickly knobs upon the back, like turbot, with dark brown streaks, extending from the head towards the tail. The first herring season commences about the latter end of May. They visit the coast in large shoals, but continue there no considerable time. They quitted the bay before we sailed out of it the first time, but were returning in October. It has already been remarked, that the herrings here were excellent, and that many of our empty casks were filled with them. Large quantities of extremely fine cod were taken, some of which were also salted: and we caught, at different times, considerable quantities of small fish, which had the appearance of smelts.

But, notwithstanding this abundance of fish above mentioned, it is on the salmon fishery alone that the inhabitants depend for their winter sustenance. On this coast all the species of these that are known to exist, are said to be found; and which were formerly characterized by the different times of their ascending the rivers. It is also reported that, though shoals of different sorts are seen floating up the rivers at the same time, they avoid mixing with

each other; that they never fail to return to the river in which they were bred, but not till the third summer; that they never live to regain the sea; that particular species frequent certain rivers, and are not to be found in others, though the sea receives them nearly at the same place.

About the middle of May, the first shoals of salmon enter the mouth of the Awatska. This kind is called *tchavitsi*, by the Kamtschadales, and is the largest and most esteemed. Three feet and a half is their usual length; and they are more than proportionally deep; their average weight being from thirty to forty pounds. The back is of a dark blue colour, with black spots, and the tail is perfectly straight. In all other respects, they resemble our common salmon. They swim with such velocity along the river, that the water is greatly agitated by their motion; and the natives, who are ever on the watch for them at their accustomed time, are convinced of their approach by this circumstance, and drop their nets immediately before them. One of the first that was taken was presented to us, but not without acquainting us that it was the highest compliment they could possibly confer upon us. We are informed, by Krascheninicoff, that it was formerly the custom, among the Kamtschadales, to eat the first fish they caught, in the midst of great rejoicings, accompanied with many superstitious ceremonies; and that, after they became subjects of Russia, it was long a matter of contention between them who should be entitled to the first. Their fishing season, for this species, begins about the middle of May, and continues till the end of June.

There is a smaller sort of salmon, weighing from

about eight to fifteen pounds, known by the name of the red fish, which assemble in the bays, and at the mouths of the rivers, early in the month of June. From this time till towards the end of September, vast quantities of them are taken upon the eastern and western coasts, where the sea receives any fresh water; and also up the rivers, almost to their very source.

Their method of catching them in the bay of Awatska, is as follows: one end of the net is fastened to a large stone at the side of the water, after which they push off about twenty yards in a canoe, dropping their net as they proceed; then they turn, and extend the other part of the net in a line parallel to the shore. Thus prepared, they carefully conceal themselves in the boat, looking earnestly for the fish, which usually hover about the shore, and whose approach is known by a rippling in the water, till they have proceeded beyond the boat. At that instant, they shoot the canoe to shore, and are almost certain of inclosing their prey. One of these nets is generally hauled by two men, with as much facility as our seines are managed by a dozen, though ours are much smaller. We had very indifferent success with our own method of hauling; but, after receiving some friendly instructions from the Kamtschadales, we were as successful as they were. Their mode of fishing in the rivers, is to shoot one net across, and haul another to it down the current.

All the lakes which communicate with the sea abound with fish which have much the appearance of salmon, and usually weigh about five or six pounds. The natives, we understand, did not think

it worth their labour to catch them. These lakes being generally shallow, the fish becomes an easy prey to the bears and dogs in the summer season; and, from the quantities of bones appearing upon the banks, vast numbers of them seem to have been devoured.

The natives dry the principal part of their salmon, and salt but very little of it. They cut a fish into three pieces; they take off the belly-piece first, and then a slice along each side of the back-bone. The belly-piece, which is esteemed the best, is dried and smoked; the other slices are dried in the air, and either eaten whole as a substitute for bread, or pulverized for paste and cakes. The head, tail, and bones, are dried and preserved for their dogs.

ANIMALS FOUND IN KAMTSCHATKA.

Argali, ibex, rein, wolf, dog, arctic fox, European fox, polar bear, in the frozen sea only, bear, wolverene, common weasel, stoat, sable, common otter, sea otter, varying hare, alpine hare, earless marmot, boback marmot, water rat, common mouse, œconomic mouse, red mouse, ichelag mouse, fœtid shrew, walrus, common seal, great seal, leporine seal, harp seal, rubbon seal, ursine seal, leonine seal, whale-tailed manati. Kamtschatka had no domestic animals till the Russians introduced them.

BIRDS FOUND IN KAMTSCHATKA.

Land Birds.

Sea eagle, cinereous eagle, white-headed eagle, crying eagle, osprey, peregrine falcon, goshawk, eagle, owl, snowy owl, raven, magpie, nut-cracker, cuckoo, wry-neck, nuthatch, white grous, wood grous, water ouzel, fieldfare, red-ring thrush, Kamtschatkan greenfinch, golden bunting, lesser red-headed linnet, dun fly-catcher, sky lark, wood-lark, white wagtail, yellow wagtail, Tschutski wagtail, yellow wren, red-start, long-billed stapazina, Awatska marsh titmouse, chimney-swallow, martin, sand-martin, European goat sucker.

WATER FOWL.

Cloven-Footed Water Fowl.

Great tern, Kamtschatkan black-headed gull, kittiwake gull, ivory gull, arctic gull, tarrock, red-legged fulmar petrel, stormy petrel, kurile petrel, blue petrel, goosander, merganser, smew, whistling fawn, great goose, Chinese goose, snow goose brent goose, eder duck, black duck, velvet duck, shoveller, golden eye, harlequin, mallard, pintail, long-tailed mouillon, shield-rake, tufted, falcated, garganey, teal, corvorant, red-faced corvorant, crane, curlew, whimbrel, common sand-piper, gambet, golden-plover, pied oyster-catcher.

Fowl with pinnated feet.

Plain phalarope.

Fowls with webbed feet.

Wandering albatross, razor-bill auk, puffin, antient, pigmy, tufted, parroquet, crested, dusky, foolish guillemot, black guillemot, imber, diver, speckled diver, red-throated diver.

The inhabitants of Kamtschatka may be said to consist of three sorts. The Kamtschadales, the Russians, and Cossacks; and a mixture produced by their intermarriages. We are informed by Mr Steller, who was long resident in this country, and who was indefatigable in endeavouring to acquire knowledge on this subject, that the Kamtschadales are people of remote antiquity, and have inhabited this peninsula for many ages; and that they doubtless descended from the Mungalians: though some have imagined they sprang from the Tongusian Tartars, and others from the Japanese.

He endeavours to support these opinions by the following arguments: that they have no tradition among them of their having migrated from any other country; that they believe they were created on this particular spot, by their great god Koutkou, who prefers them to all his other creatures: that they are the happiest of all beings; and that their country far surpasses any other; affording means of gratification which cannot be obtained in other regions. Further, to support his opinions he says, that they are perfectly acquainted with all the plants which the peninsula produces, their qualities, and

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A WOMAN AND MAN OF KAMTSCHATKA.

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A MAN AND WOMAN OF KAMSCH[illegible]

their several uses; a species of knowledge of too
extensive a nature to be acquired in a short time:
their instruments and utensils are totally differ-
from those of any other nation, and are made
nimitably neat and dexterous, as to be a satis-
ory demonstration that they were invented by
nselves, and must have been long in arriving at
a pitch of perfection: that before the Rus-
and Cossacks came amongst them, they had
the most distant knowledge of any people, ex-
the Koreki: that, till very lately, they had
the smallest intercourse with the Kuriles, and
later that they had any knowledge of the Ja-
se; that being acquired by means of a vessel
h was shipwrecked on their coast: and, he fur-
adds, that, when the Russians first got a foot-
n the country, they found it extremely popu-

e supposes them to be descended from the Mun-
ns, from the words in their language having
ar terminations to those of the Mungalian Chi-
; and that, in both languages, the same princi-
f derivation is preserved; that they are gene-
short, their complexions swarthy, the face
l, the nose short and flat, the eyes small and
, the legs small, and they have many other pe-
ities which are to be observed among the Mun-
ns. He therefore concludes, that they fled to
peninsula for safety from the rapacity of the
n conquerors; as the Laplanders and others
ted to the extremities of the north, from the
advances of the Europeans.

The Russians, having made themselves masters of that vast extent of coast of the frozen sea, esta-

blished posts and colonies, and appointed commissaries to explore and subject the countries still further to the east. They soon discovered that the wandering Koriacs inhabited part of the coast of the sea of Okotsk, and they found no difficulty in making them tributary. These being at no great distance from the Kamtschadales, with whom they had frequent intercourse, a knowledge of Kamtschatka must naturally follow.

To Feodot Alexeiff, a merchant, the honour of the first discovery is attributed, about the year 1648. That, being separated from seven other vessels by a storm, he was driven upon the coast of Kamtschatka, where he and his companions remained a whole winter, but they were afterwards cut off by the Koriacs. This was corroborated, in some degree, by Simeon Deshneff, who was commander of one of the seven vessels, and was driven on shore near the mouth of the Anadir. But, as these discoverers (if they really were so) did not live to relate what they had discovered, a cossack, named Volodimir Atlassoff, is the first acknowledged discoverer of Kamtschatka.

He was sent, in 1697, in the capacity of commissary, from fort Jakutsk to the Anadirsk, with directions to call in the Koriacs to his assistance, in order to discover, and make tributary, the countries beyond theirs. With sixty Russian soldiers, and as many cossacks, he penetrated, in the year 1699, into the heart of the peninsula, and gained the Tigil. In his progress he levied a tribute upon furs, and proceeded to the river Kamtschatka, on which he built an *ostrog*, now called Verchnei; and leaving a garrison of sixteen cossacks, returned, in the

year 1700, to Jakutsk, with vast quantities of valuable tributary furs. These he very judiciously accompanied to Moscow, and was rewarded for his services by the appointment of commander of the fort of Jakutsk; and, at the same time, received orders to return to Kamtschatka, with a reinforcement of a hundred cossacks, ammunition, and whatever might conduce to the completion and settlement of his new discoveries. Proceeding with his force towards the Anadirsk, he perceived a bark on the river Tungaska, which proved to be laden with Chinese merchandise. He immediately pillaged this vessel, in consequence of which the owners remonstrated to the Russian court; he was seized on at Jakutsk, and conducted to a prison.

All this time Potoff Serioukoff, whom Atlassoff had left, enjoyed the quiet possession of the garrison of Verchnei; and, though his corps was too inconsiderable to enforce the payment of a tribute from the inhabitants, yet he had the address and management to traffic with them as a merchant, on very advantageous terms. His conciliating disposition so far gained him the esteem of the natives of Kamtschatka, that they lamented his departure, when he set off to return to the Anadirsk. He and his party were, however, attacked by the Koriacs, and unfortunately cut off in the year 1703. Several other commissaries were successively sent into Kamtschatka during the disgrace and trial of Atlassoff.

Atlassoff was restored to his command in 1706, and intrusted with the management of a second expedition into Kamtschatka, after having received instructions to ingratiate himself into the favour of

the natives by all peaceable and amicable means; but, on no consideration, to have recourse to compulsive measures; but, so far from paying any attention to these instructions, he rendered the natives extremely hostile to their new governors, by repeated acts of cruelty and injustice; and even alienated the affections of his own people, insomuch that it created a mutiny of the Cossacks, who demanded a new commander.

The Cossacks, having succeeded in displacing Atlassoff, took possession of his effects; and having tasted the sweets of plunder, and living without discipline or controul, his successors were unable to reduce them to order and subjection. No less than three successive commanders were assassinated. From that period, to the grand revolt of the Kamtschadales in 1731, the history of this country presents an unvaried detail of revolts, massacres, and murders, in every part of the peninsula.

This revolt was principally occasioned by the discovery of a passage from Okotsk, to the river Bolchoireka, made by Cosmo Sokoloff. The Russians, before this period, could enter this country only on the side of the Anadirsk; which afforded frequent opportunities to the natives of plundering the tribute, as it was conveyed out of the peninsula by so long a journey. But, when this communication was discovered, the tribute could be exported with speed and safety; and troops and military stores might now be imported into the very heart of the country. The natives were convinced that this circumstance would give the Russians so great an advantage over them, as must very shortly confirm their dominion; and therefore they immediate-

ly resolved to make one grand effort for their liberty.

Beering had, at this time, a small squadron on the coast, and had dispatched what troops could be spared from the country to join Powloutski, in an expedition against the Tschutski. The time determined on, therefore, for carrying their plan into execution, was when Beering should have set sail. This was certainly a well-chosen opportunity; and it is matter of astonishment, that, notwithstanding this conspiracy was so general that every native is said to have had his share in it, the whole was conducted with such secrecy, that the Russians had no suspicion that any hostile measures were meditating against them.

They were equally judicious in planning their other operations. A strong body was in readiness to prevent any communication with the fort of Anadirsk, and detached parties were scattered on the eastern coast, in order to seize any Russians that might accidentally arrive from Okotsk. Things were thus situate, when Cheekhaerdin, (who was then commissary) was escorted by the troops of the fort, with his tribute, from Verchnei to the mouth of the river Kamtschatka, where a vessel was to remove it, and convey it to the Anadir.

It was further resolved on, that the revolt should not commence till this vessel should be out at sea; and such resolution was communicated to the different chiefs. In consequence of which, the moment she disappeared, a most dreadful massacre began. Every Russian and Cossack that could be found, was immediately put to death, and their habitations were reduced to ashes. A large party of them

ascended the river Kamtschatka, took possession of the fort and *ostrog*, which had just been quitted by the commissary, and slew all that were in it; and all the buildings were consumed by fire, the fort and church only excepted. Here they received information, that the Russian vessel which had got the commissary on board, was still remaining on the coast, and therefore resolved to defend themselves in the fort.

Fortunately the vessel was driven back to the harbour; for, had she prosecuted her voyage, the utter extirpation of the Russiaus must have ensued. The Cossacks, on their landing, finding that their wives and children had been murdered, and their habitations consumed by fire, were enraged almost to madness. They proceeded immediately to the fort, and attacked it most furiously; the natives defending it with equal resolution. The powder magazine at length took fire, the fort was blown up, and with it almost every man that was in it. Various rencounters and assassinations succeeded this event; till, at length, two of the leaders being slain, and another (first dispatching his wife and children) having put a period to his own existence, peace was again established. From that period no particular disturbances happened till 1740, when a few Russians were slain in a tumult, but no further consequences ensued; and every thing has since gone on very peaceably, excepting the insurrection at Bolcheretsk, which has been already mentioned.

Though a great many of the inhabitants were lost in quelling the rebellion of 1731, the country had afterwards recovered itself, and was become as

populous as ever in 1767; when the small-pox was, for the first time, introduced among them, by a soldier from Okotsk. It broke out with much fury, and was as dreadful in its progress as the plague; seeming almost to threaten their entire extirpation. Twenty thousand were supposed to have died by this filthy disorder in Kamtschatka, the Kurile Islands, and the Koreki country. The inhabitants of whole villages were sometimes swept away; of which sufficient proofs remain. There are eight *ostrogs* about the bay of Awatska, which we were told had been completely inhabited, but now they are all become desolate, except St Peter and St Paul; and only seven Kamtschadales, who are tributary, reside in that. At the *ostrog* of Paratounca, no more than thirty-six native inhabitants remain, including men, women, and children; tho' it contained three hundred and sixty before it was visited by the small-pox. We passed no less than four extensive *ostrogs* in our journey to Bolcheretsk, which had not a single inhabitant in either of them. The number of the natives is now so much diminished, and so many Russians and Cossacks are continually pouring in upon them, and intermixing with them by marriage, that, it is probable, very few of them will be left in less than half a century. We were informed by Major Behm, that those who at this time pay tribute do not exceed three thousand, including the Kurile islanders.

The number of military in the five forts of Nichnei, Verchnei, Tigil, Bolcheretsk, and St Peter and St Paul, are about four hundred, including Russians and Cossacks. Nearly the same number are said to be at Ingiga; which, though in the

north of the peninsula, is under the commander of Kamtschatka. The Russian traders and emigrants are not very considerable.

The government established over this country by the Russians, considered as a military one, is remarkably mild and equitable. The natives are suffered to elect their own magistrates in their own mode, who exercise the same powers they have ever been accustomed to. One of these, called a *Toion*, presides over each *ostrog*, to whom all differences are referred; and who awards fines and punishments for all offences and misdemeanors; referring to the governor of Kamtschatka those which are the most intricate and enormous, not choosing to decide upon them himself. The *Toion* also appoints a civil officer under him, called a corporal, who assists him in his duty, and officiates for him in his absence.

An edict has been issued by the Empress of Russia, that no offence shall be punishable with death. But we are told, that, in cases of murder (which rarely happens here) the *knout* is inflicted with such severity, that the offender seldom survives the punishment.

In some districts, the only tribute that is exacted is a fox's skin; in others, a sable's; and, in the Kurile isles, a sea-otter's; but, as the latter is considerably more valuable, the tribute of several persons is paid with a single skin. The tribute is collected by the *Toions*, in the different districts, and is so inconsiderable as hardly to be considered in any other light than as an acknowledgement of the Russian dominion over them.

The Russians are not only to be commended for the mildness of their government, but are also entitled to applause for their successful endeavours in converting the natives to Christianity; there being now but very few idolaters remaining among them. If we form a judgment of the other missionaries, from the benevolent pastor of Paratounca, more suitable persons could not possibly be engaged in this business. It may be necessary to observe, that the religion inculcated here, is that of the Greek church. In many of the *ostrogs* free-schools are established for the instruction of the natives and Cossacks in the Russian language.

The articles exported from this country consist entirely of furs, and this business is principally conducted by a company of merchants appointed by the empress. Twelve was the number of them originally, but three have since been added to them. Besides certain privileges allowed them, they are distinguished by wearing a gold medal, expressive of the empress's protection of the fur trade. There are other inferior traders, chiefly Cossacks, in different parts of the country. Whilst the principal merchants remain here, they reside either at Bolcheretsk, or the Nishnei *ostrog*; the trade centering entirely in those two places. This business was formerly carried on wholly in the way of barter, but every article is at present purchased with ready money, no inconsiderable quantity of specie being circulated in that wretched country. The furs produce a high price; and the natives, from their mode of life, require few articles in return. Our sailors brought a quantity of furs from the coast of America, and were both pleased and astonished on receiving such

a quantity of silver for them from the merchants; but, as they could not purchase gin or tobacco with it, or any thing else that would afford them any degree of entertainment, the roubles were soon considered as troublesome companions, and they were frequently employed in kicking them about the deck. Our men received thirty roubles of a merchant for a sea-otter's skin, and in the same proportion for others; but understanding they had great quantities to dispose of, and perceiving that they were unacquainted with traffic, he afterwards procured them at a much cheaper rate.

European articles are the principal that are imported, but they are not solely confined to Russian manufactures. They come from England, Holland, Siberia, Bucharia, the Calmucks, and China. They chiefly consist of coarse woollen and linen cloths, stockings, bonnets, and gloves; thin Persian silks, pieces of nankeen, cottons, handkerchiefs, both of silk and cotton; iron stoves, brass and copper pans, files, guns, powder and shot; hatchets, knives, looking-glasses, sugar, flour, boots, &c. We saw many of these articles in the possession of one of the merchants, who came from Okotsk in the empress's galliot. These commodities, we observed, sold for three times the sum they might have been purchased for in England. And, notwithstanding the merchants have so extravagant a profit upon these imported goods, they receive still a greater advantage from the sale of the furs at Kiachta, a considerable market for them on the frontiers of China. At Kamtschatka, the best sea-otter skins usually produce about thirty roubles a piece; at Kiachta, the Chinese merchant gives more than double that

price, and disposes of them again at Pekin for a much greater sum; after which, an additional profit is made of many of them at Japan. If, then, the original value of a skin at Kamtschatka is thirty roubles, and it is afterwards transported to Okotsk, thence by land thirteen hundred and sixty-four miles to Kiachta, thence seven hundred and sixty miles to Pekin, and after that to be transported to Japan, what a lucrative trade might be established between Kamtschatka and Japan, which is not above three weeks sail from it at the utmost?

Furs of all kinds, exported from Kamtschatka across the sea at Okotsk, pay ten per cent. duty, and sables twelve. And merchandise, of all denominations, imported from Okotsk, pay a duty of half a rouble for every pood, which is thirty-six English pounds.

The export and import duties are paid at Okotsk; but the tribute which is collected at Bolcheretsk amounts to the annual sum of ten thousand roubles, as we were informed by Major Behm.

Six vessels, of the burthen of forty or fifty tons, are employed by the empress of Russia between Okotsk and Bolcheretsk; five of them are occupied in transporting stores, &c. from Okotsk to Bolcheretsk, except that some of them go to Awatska and the Kamtschatka river, once in the space of two or three years; the sixth answers the purpose of a packet boat, and is always equipped and in readiness to convey dispatches. About fourteen vessels are also employed by the merchants in the fur trade, amongst the islands to the east. In the harbour of St Peter and St Paul we saw one of

these frozen up, which was to sail to Oonalashka when the season would permit.

It may be necessary to observe, that the principal and most valuable part of the fur trade lies among the islands between Kamtschatka and America. Beering first discovered these in 1741, and as they were found to abound with sea-otters, the Russian merchants sought anxiously for the other islands seen by that navigator, southeast of Kamtschatka, named in Muller's map the islands of St Abraham, Seduction, &c. They fell in with no less than three groups of islands in these expeditions. The first, about fifteen degrees east of Kamtschatka; another, twelve degrees east of the former; and the third, Oonalshka, and the neighbouring islands.

These mercantile adventurers also proceeded as far as Shumagin's Islands, of which Kodiak is the largest. But here they met with so warm a reception, for attempting to compel the payment of a tribute, that they never ventured so far again. The three groups before mentioned, however, were made tributary. The whole sea between Kamtschatka and America is, according to the Russian charts, covered with islands; for as those who were engaged in these expeditions frequently fell in with the land, which they supposed did not tally with the situation laid down by the preceding adventurers, they immediately supposed it to be a new discovery, and reported it accordingly on their return; and, as these vessels were usually out three or four years, and sometimes longer, such mistakes could not immediately be rectified. It is pretty certain, however, that only those islands which have

been enumerated have been discovered in that sea, by the Russians, south of 60° latitude.

The sea-otter skins, which are certainly the most valuable article in the fur trade, are principally drawn from these islands; which being now under the Russian dominion, the merchants have factors residing in settlements there, for the sole purpose of bartering with the natives. To extend this trade, an expedition was fitted out by the admiralty of Okotsk, to make discoveries to the north and north-east of the above-mentioned islands, and the command of it given to lieutenant Synd. But, as this gentleman directed his course too far north, he did not succeed in the object of his voyage; for, as we never found a sea-otter north of Bristol bay, they, perhaps, avoid those latitudes where large amphibious sea-animals are numerous. The Russians have not since undertaken any expedition for making discoveries to the eastward; but they will, probably, make an advantageous use of our discovery of Cook's River. Notwithstanding the general intercourse between the natives, the Russians, and Cossacks, the former are as much distinguished from the latter by their habits and disposition, as by their features and general figure.

The persons of the natives having already been described, we shall only add, that in their stature, they are below the common height, which Major Behm attributes to their marrying so very early; both sexes usually engaging in the conjugal state at thirteen or fourteen years of age. They are exceedingly industrious, and may be properly contrasted with the Russians and Cossacks, who frequently intermarry with them, apparently for no

other reason, but that they may be supported with laziness and sloth. To this inactivity may be attributed those scorbutic complaints which most of them are dreadfully afflicted with; whilst the natives, who exercise in the open air, entirely escape them.

Their habitations consist of three distinct sorts, their *jourts*, *balagans*, and *log-houses*, which are here called isbas; they inhabit the first in the winter, and the second in the summer; the third are introduced by the Russians, wherein only the wealthier people reside. The *jourts* are thus constructed. A kind of oblong square is dug about six feet deep in the earth; the dimensions must be proportioned to the numbers who are to inhabit it, for it is usual for several to live together in the same *jourt*. Strong wooden posts, or pillars, are fastened in the ground, at equal distances from each other, on which the beams intended to support the roof are extended; which is formed by joists, one end of which rests upon the ground, and the other on the beams. Between the joists the interstices are filled up with wicker work, and turf is spread over the whole. The external appearance of a *jourt* resembles a round squat hillock. A hole, serving for a chimney, window, and door, is left in the centre, and the inhabitants go in and out by the assistance of a long pole, having notches deep enough to afford a little security for the toe. On the side, and even with the ground, there is another entrance, appropriated to the use of the women; but if a man passes in or out of this door, he becomes as much an object of ridicule as a sailor who descends through lubber's hole.

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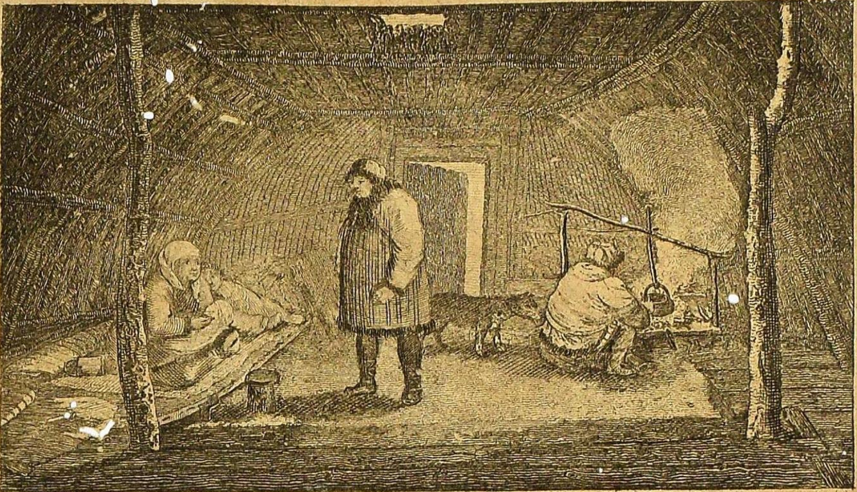
SUMMER AND WINTER HABITATIONS IN KAMTSCHATKA.



J. Webber del.

THE INSIDE OF A WINTER HABITATION IN KAMTSCHATKA

A *jourt* consists of one apartment, forming an oblong square. Broad platforms, made of boards, are extended along the sides, at the height of about six inches from the ground, which serve them for sitting on, and on which they repose, first taking care to cover them with mats and skins. The fire-place is on one side, and on the other their provisions and culinary utensils are stowed. When they make entertainments, the compliment is considered in proportion to the heat of the *jourts;* the hotter they are made, the more gracious is the reception of the guests considered. We always found them so extremely hot as to be intolerable. They generally retire to their *jourts* about the middle of October, and continue in them till the month of May is more than half expired.

To erect a *balagan*, nine posts are fixed into the earth, in three regular rows, at equal distances from each other, to the height of about twelve or thirteen feet from the surface. About ten feet from the ground rafters are laid from post to post, and securely fastened by strong ropes. The joists are laid upon these rafters, and a turf-covering completes the platform or floor of the balagan. A roof of a conical figure is raised upon this, by means of long poles, which are fastened to the rafters at one end, and meet together in a point at the tops. The whole is covered, or rather thatched, with a coarse kind of grass. These summer habitations have two doors, placed directly opposite to each other, to which they ascend by the same kind of ladders that are used in the *jourts.* In the lower part, which is left entirely open, they dry their fish, vegetables, and other articles intend-

ed for the consumption of the winter. Though six families usually live together in one jourt, a *balagan* is seldom occupied by more than one at a time.

The *isbas*, or log-houses, are thus erected:—Long timbers are piled horizontally, with the ends let into each other, and the seams are filled up or caulked with moss. Like those of our common cottages, the roof is sloping, and thatched either with grass or rushes. Each log-house has three apartments in the inside. One end may be said to be a kind of entry, which extends the whole width and height of the house, and seems to be a kind of receptacle for their bulky articles, as sledges, harness, &c. This has a communication with their best apartment, which is in the middle, and is furnished with broad benches, calculated both for eating and sleeping upon. A door leads from this into the kitchen, almost half of which is taken up with an oven, or fire-place, which is let into the wall that separates the middle apartment and the kitchen, and is so constructed as to communicate the heat to both rooms at the same time. There are two lofts over the kitchen and middle apartment, to which the inhabitants ascend by a ladder placed in the entry for that purpose. Each apartment has two small windows made of *talc*, and, among the inferior people, of fish-skin. The boards and beams of their habitations are smoothed only with a hatchet, for they are strangers to the plane; and the smoke has rendered them of a deep shining black.

A town is called an *ostrog* in Kamtschatka, and consists of several houses or habitations of the va-

rious kinds above mentioned. *Balagans* are considerably the most numerous, and it is remarkable that we never saw a house of any kind that was detached from an *ostrog*. There are, in St Peter and St Paul, seven log-houses, nineteen *balagans*, and three jourts. Paratounca is nearly of the same size. Karatchin and Natcheekin have not so many log-houses as the former, but rather more *balagans* and *jourts*; whence it may be concluded that such is the most general size of an *ostrog*.

The dress of the Kamtschadale women having already been described, we shall proceed to that of the men. The upper garment resembles that of a waggoner's frock. If for summer wear, it is made of nankeen; if intended for winter, it is made of a skin, (generally that of a deer or dog) having one side tanned, and the hair preserved on the other, which is worn innermost. A close jacket of nankeen, or some other cotton stuff, is the next under this; and beneath that, a shirt made of thin Persian silk, of a red, blue, or yellow colour. They wear also a pair of long breeches, or tight trowsers, of leather, reaching below the calf of the leg. They have a fur cap, having two flaps that are usually tied up close to the head, but are permitted to fall round the shoulders in bad weather.

Their fur dress, which was presented by Major Behm's son to captain King, is one of those worn on ceremonious occasions by the *Toions*. It is shaped like the exterior garment we have just described, and consists of small triangular pieces of fur, chequered brown and white, and so ingeniously joined as to appear to be of the same skin. A border, of the breadth of six inches, curiously

wrought with different coloured threads of leather, surrounds the bottom, and produces a rich effect. A broad edging of the sea-otter's skin is suspended to this. The sleeves are ornamented with the same materials. An edging of it also encircles the neck, and surrounds the opening at the breast. It is lined with a beautiful white skin. And the present was accompanied with a pair of gloves, a cap, and a pair of boots, executed with the utmost neatness, and composed of the same materials. The Russians who reside in Kamtschatka wear the European dress; and the uniform worn by the troops here is of a dark green turned up with red. The people, situate to the north and south of this country, being but imperfectly known, we shall give such information as we have been able to acquire respecting the Kurile Islands, and the Koreki and Tschutski.

The Kuriles are a chain of islands extending from latitude 51° to 45°, running from the southern promontory of Kamtschatka to Japan, in a southwest direction. The inhabitants of the neighbourhood of Lopatka, who were themselves called Kuriles, gave those islands the same name as soon as they became acquainted with them. Spanberg says they are twenty-two in number, exclusive of the very small ones. The northernmost island, which is called Shoomska, is about three leagues distant from the promontory Lopatka, and its inhabitants consisting of a mixture of natives and Kamtschadales. The next, which is named Paramousir, is considerably larger than Shoomska, and is inhabited by the real natives; whose ancestors, they say, came from an island, called Oneecutan, a little fur-

ther to the south. The Russians paid their first visit to these two islands in 1713, and added it to the dominions of the Empress. The others, as far as Oosheesheer inclusive, are now made tributary, if we may rely upon the information of the worthy pastor of Paratounca, their missionary, who pays them a visit once in three years, and mentions the islanders in the most respectable terms, extolling them for their generosity, hospitality, and humanity; and that they excel their Kamtschadale neighbours as much in the gracefulness of their persons as in their docility and understanding.

Though the island of Oosheesheer is the furthest to the south of any under the dominion of Russia, yet they are said to trade to Ooroop, which is the eighteenth in order, and is the only one that has a good harbour for vessels of burthen. Nageedsda lies to the south of this, and is said to be inhabited by a race of men who are remarkably hairy, and who live in a state of perfect independence like those of Ooroop *.

Nearly in the same direction lie a group of islands called Jeso, by the Japanese; a name also given by them to the chain of islands between Kamtschatka and Japan. That called Matmai, which is the furthest to the south, belongs to the Japanese, and has a garrison and fortifications on the side towards the continent. The islanders of Kunachir and Zellany, to the northeast of Matmai,

* Spanberg, speaking of these people, says, their bodies are covered all over with hair, that they wear a loose stripped silk gown, and many of them have silver rings pendent from the ears. Their being hairy all over the body is also mentioned in the journal of the Castricom.

and three others, called The Three Sisters, still further to the northeast, are entirely independent. The inhabitants of Matmai barter with those of the islands last mentioned, as well as with those of the Kuriles to the northward.

Many of the inhabitants of those islands that are under the dominion of Russia are now converted to Christianity. And perhaps the time is not far distant when an advantageous commerce will be carried on between Kamtschatka and this extensive chain of islands, which may afterwards produce a communication with Japan itself. This intercourse may probably be facilitated by a circumstance which Major Behm related, that several Russians, having been taught the Japanese language, by two natives of that country who had been shipwrecked on the coast of Kamtschatka, had been sent among those islands. The advantages that must infallibly accrue to the Russians by establishing a commerce with the Japanese, have been already adverted to, and are sufficiently obvious.

The Koreki country consists of two distinct nations, which are called the wandering and fixed Koriacs. Part of the isthmus of Kamtschatka is inhabited by the former, as well as all the coast of the Eastern Ocean, from thence to the Anadir. The nation of the wandering Koriacs extends westward towards the river Kovyma, and along the north-east of the sea of Okotsk, as far as the river Penskina.

The resemblance between the fixed Koriacs and the Kamtschadales is very striking; both countries too depend alike on fishing for subsistence. Their clothing and habitation are equally similar. The

fixed Koriacs are under the district of the Ingiga, and are tributary to Russia.

The wandering Koriacs are wholly employed in breeding and pasturing deer, and are said to have immense numbers in their possession, it being common for a single chief to have a herd of four or five thousand. Deer is the food they subsist upon, and have an aversion to every kind of fish. They erect no *balagans:* their only habitations being somewhat like the Kamtschadale *jourts*, except that, in winter, they are covered with raw deer-skins, and, in summer, with such as have been tanned. Their sledges are drawn only by deer, and those which are used in drawing them feed in the same pasture with the others. If they are wanted, the herdsman makes use of a certain cry which is familiar to them, which they obey by quitting the herd immediately. The two nations of the Koriacs, (as we were informed by the priest of Paratounca) and the Tschutski, make use of different dialects of the same language, but it has not the smallest affinity to that of the Kamtschadale.

The country inhabited by the Tschutski is bounded by the Anadir on the south, and extends to the Tschutskoi Noss. Their attention, like that of the wandering Koriacs, is confined chiefly to their deer, with which their country abounds. They are a courageous, well-made, warlike race of people, and are formidable neighbours to the Koriacs of both nations, who often experience their depradations. The Russians have long endeavoured to bring them under their dominion; and though they have lost a great number of men in their different

expeditions to accomplish this purpose, they have never yet been able to effect it.

As the Lords of the Admiralty, in the instructions which they had given for the regulation of the present voyage, had intrusted the commanding officer of the expedition with a discretionary power, in case of not succeeding in the discovery of a passage from the Pacific Ocean into the Atlantic, to make choice, in his return to England, of whatever route he should judge best adapted for the improvement of geography, captain Gore desired that the principal officers would deliver their sentiments, in writing, relative to the mode in which these instructions might most effectually be carried into execution. The result of their opinions, which, to his great satisfaction, he found unanimous, and perfectly agreeing with his own, was, that the condition of our vessels, of the sails, cordage, &c. rendered it hazardous and unsafe to make any attempt, as the winter was now approaching, to navigate the sea between Asia and Japan, which would otherwise have opened to us the most copious field for discovery: that it was therefore most prudent to steer to th[e] eastward of that island, and, in our way thither [illegible] sail along the Kuriles, and examine, in a most par[t]icular manner, those islands that are situate nearest to the northern coast of Japan, which are said to be of considerable extent, and not subject to the Russians or Japanese. Should we have the good fortune to meet with some secure and commodious harbours in any of those islands, we supposed they might prove of considerable importance, as convenient places of shelter for subsequent navigators, who might be employed in exploring the

seas, or as the means of producing a commercial intercourse among the adjacent dominions of the two above-mentioned empires. Our next object was to take a survey of the coasts of the Japanese isles; after which we designed to make the coast of China, as far to the north as was in our power, and proceed along it to Macao.

This plan of operation being adopted, captain King was ordered by captain Gore, in case the two ships should separate, to repair without delay to Macao; and on the 9th of October, about six o'clock in the afternoon, having cleared the entrance of the bay of Awatska, we made sail to the southeastward, the wind blowing from the northwest and by west. A perfect calm ensued at midnight, and continued till the noon of the following day; at which time the lighthouse was at the distance of fourteen or fifteen miles, bearing north half west; and Cape Gavareea bore south by west half west. Our present depth of water being sixty and seventy fathoms, our people were very profitably engaged in catching cod, which were extremely fine, and in great abundance. A breeze springing up from the west about three o'clock in the afternoon, we steered to the south along the coast.

A headland now opened with Cape Gavareea, in the direction of south by west, situate about twenty-one miles beyond it. Betwixt them are too narrow, though deep inlets, which may perhaps unite behind what has the appearance of an elevated island. The coasts of these inlets are rather steep and clifty. The hills, which break with abruptness, form chasms and valleys that are plentifully furnished with wood.

Between Awatska Bay and Cape Gavareea, which lies in the longitude of 158° 38′, and in the latitude of 52° 21′, there appear to be several inlets, which may, at first sight, flatter the navigator with hopes of procuring shelter and good anchorage: but we were assured by the Russian pilots, that there are none that will admit vessels even of the smallest size, as the spaces which seem vacant between the lofty projecting headlands are filled up with low land.

We again had a calm towards the evening; but, about midnight, a light breeze sprung up from the north, which gradually augmented to a strong gale. On Monday the 11th, at noon, we were in the latitude of 52° 4′, and in the longitude of 158° 31′, Cape Gavareea bearing north by west a quarter west, and the southern extremity southwest half west. We were now at the distance of nine or ten miles from the nearest part of the coast, and perceived the whole inland country covered with snow. A point of land towards the south, which we judged to be in the latitude of 51° 54′, constituted the northern side of a deep bay, distinguished by the name of A[illegible]chinskoi, in whose distant bottom we imagined [illegible] a large river discharged itself, as the land behind [illegible]ppeared remarkably low. To the southward of Achachinskoi Bay the land did not exhibit such a rugged and barren aspect as was observable in that part of the country which we had before passed.

We had variable winds during the night, accompanied with rain; but, the next morning, at four o'clock, the wind began to blow with such violence from the northeast quarter, that we were obliged to

double reef the top-sails, and thought proper to stand to a greater distance from the land. A few hours after the weather became more moderate and fair; in consequence of which we again stood in for the land. Our latitude at twelve was 51°, and our longitude 157° 25'. The most northerly land in view, being the point which we have already mentioned as first opening with Cape Gavareea, was in the direction of north-northeast. A head-land, having a flat summit, which is situate in the latitude of 51° 27', and forms the southern point of an inlet, named Girowara, bore north a quarter east, and the most southerly land in sight was about eighteen miles distant, bearing west three quarters north. We could at this time faintly perceive low land extending from the southern extremity; but, as the wind shifted to the northwest, we were unable to obtain a nearer view of it.

At six o'clock in the afternoon we discerned, from the mast head, Cape Lopatka, which is the most southern point of Kamtschatka. This Cape, which is very low and flat, and gradu lly slopes from the elevated level land that we had sig t of at noon, bore west half north, at the distanc of fifteen or sixteen miles; and the high land, at ame time, bore northwest by west half west. This poin land forming so distinguished an object in the geograp y of the eastern coast of Asia, we were glad of a opportunity of ascertaining, by accurate observations, its true position, which is in the longitude of 156° 45', and in the latitude of 51°. We perceived, to the northwest of it, a very lofty mountain, whose summit was lost in the clouds. At the same instant the first of the Kurile Islands, named

Shoomska, made its appearance in the direction west half south.

The passage between Shoomska and Cape Lopatka is represented by the Russians as being one league in breadth, and extremely dangerous, as well on account of the rapidity of the tides, as of the sunken rocks which lie off the Cape. The coast, from Cape Gavareea to Lopatka trends to the south-eastward. The land to the south of Achachinskoi is not so elevated and broken as betwixt that bay and the entrance of the bay of Awatska, being only of a moderate height towards the sea, with hills rising gradually further inland. The coast is of considerable steepness, and abounds with white chalky patches.

Having a calm at noon, we had an opportunity of catching some excellent cod. Our depth of water at this time was forty fathoms; and our distance from Cape Lopatka was between five and six leagues. During the night we stood to the south-southwest, under an easy sail, with a westerly wind. We sounded at midnight, and found ourselves in sixty fathoms water.

On the 13th, at break of day, we descried the second of the Kurile Islands, named Paramousir by the Russians, extending from west half south to northwest by west. This land was exceedingly high, and almost wholly covered with snow. At twelve o'clock its extremities bore from west-northwest half west to north-northwest half west; and a lofty peaked mountain, from which some of our people imagined they beheld smoke issuing, was at the distance of twelve or thirteen leagues, bearing northwest by west half west. Our latitude at this time

was 49° 49′, and our longitude 157°. We observed, in the course of the day, several whales, and a considerable number of Albatrosses and gulls.

The island of Paramousir is the largest of the Kuriles that are subject to the dominion of the Russians, and is worthy of a more accurate survey than we were on this occasion enabled to take. For, in the afternoon, the westerly wind increasing to a brisk gale, it was not in our power to make a nearer approach to it than we had made at noon; we were, therefore, obliged to content ourselves with endeavouring to determine its position at that distance. The southern extreme of the island stands, according to our computation, in the latitude of 49° 58′, the northern extremity we place in the latitude of 50° 46′, and in the longitude of 10′ west of Cape Lopatka; and as this situation does not materially differ from that which the Russians have assigned, it is in all probability very near the truth.

While we were abreast of Paramousir, we had a very violent swell from the north-eastward, though the wind had continued for some time in the western quarter; a circumstance which more than once occurred to our observation during the course of the voyage. In the night we sounded, but did not reach the bottom with fifty fathoms line. The two following days the wind blowing fresh from the west, obliged us to steer to the southward, and consequently prevented us from seeing any more of the Kuriles.

On Saturday the 16th, at noon, our latitude was 45° 27′; our longitude, deduced from many lunar observations taken during the three preceding days, was 155° 30′, and the variation was 40° 30′ east.

In this situation we were almost encompassed by the real or pretended discoveries of prior navigators, and could not readily determine to which we should direct our course. Towards the south and the south-west a group consisting of five islands, named Kunashir, Zellany, and the Three Sisters, were placed in the French charts. According to the same charts, we were now about ten leagues to the west of De Gama's Land, which in April last we had passed to the eastward, at a distance somewhat less than the present, without observing the least appearance of it; from which circumstance it may reasonably be inferred, that if such land has any existence, it must be an island of very small extent. If, on the other hand, we adopt the original position of this land, as fixed by Texeira, it was situate to the west by south; and the Company's Land *, Staten Island †, and the land of Jeso, were likewise imagined to lie nearly in the same direction.

With respect to the famous land of Jeso, which has for a long time proved a stumbling block to modern geographers, it may be observed, that it was first brought to the knowledge of Europeans by the Castricom and Breskes. The name, from the earliest accounts, appears to have been well known to the Kamtschadales and Japanese, and indiscri-

* The Dutchmen who sailed in the Castricom and Breskes, had sight of this land, which they supposed was a part of the American continent; but there now remains very little doubt of its being the Islands of Nadeegsda and Ooroop.

† This land, which was also discovered by the Castricom, seems, from the situation assigned to it in the journal of that vessel, to be the islands called the Three Sisters.

minately used by them for all the islands that are situate between Japan and Kamtschatka. It has been since affixed to an extensive imaginary island or continent, pretended to have been discovered by the two Dutch ships above mentioned; and therefore it may not perhaps be deemed improper to take the grounds of this error into our consideration. The expedition in which those vessels were engaged, was undertaken with a view of exploring the eastern coast of Tartary; but a storm separating the two ships off the southeast point of Japan, they sailed along the eastern side of that island in different tracks; and passing its northern extreme, proceeded singly on their voyage. De Vries, commander of the Castricom, steering a northerly course, fell in with land on the third day, in the 42d degree of latitude. He sailed (according to the journal of the expedition) along the southeastern coast in a continual fog, for the space of about sixty leagues; and having brought his ship to anchor in several places, had a friendly communication with the natives. Now, as the islands of Zellany, Kunashir, and Matmai appear, from the discoveries of captain Spanberg, to stand exactly in this situation, it is more than probable that they are one same land; and the error of De Vries, in supposing them to be one continent, seems to be sufficiently accounted for from the circumstance of the fog, without our adopting the supposition of an earthquake, by which Mr Muller, desirous of reconciling the general opinion with the later discoveries of the Russians, imagines the several parts to have been separated. The journal afterwards mentions the discovery of Staten Island, the Company's Land, respecting which we

have already declared our sentiments. When they had passed through the Straits of De Vries (continues the journal), they entered an extensive, wild, and tempestuous sea, in which they proceeded, with dark misty weather, to the 48th degree of northern latitude; after which, being driven to the south by adverse winds, they again fell in with land towards the west, in the latitude of 45°, which they still supposed was a part of the continent of Jeso; whereas, if any person will examine Jansen's map of their discoveries, which appears to be very accurate, he will not, we think, entertain a doubt of their being at this time on the coast of Tartary. After they had traced this land four degrees to the northward, they returned towards the south, thro' the same straits they had before passed.

But, to return to the narrative of our voyage; the wind having veered, in the afternoon of the 16th, to the northward, we hauled round to the west. In the course of this day we observed several albatrosses, fulmars, and numerous flocks of gulls: we also saw a number of fish, which were called grampuses by our sailors; but we were rather inclined to judge, from the appearance of those who passed close to our vessels, that they were the *kasatka*, or sword-fish, mentioned by Krascheninikoff, who has given a curious account of their mode of attacking the whales. In the evening, being visited by a small land bird, about the size of a goldfinch, and not unlike that bird in plumage and shape, we thought proper to keep a careful look-out for land. However, upon our trying for soundings at mid-night, we did not strike ground with forty-five fathoms of line.

The next day, at noon, our longitude was 154°, and our latitude 45° 7′. The wind again becoming westerly, we were under the necessity of steering a more southerly course; and about mid-night we had a fresh gale from the same quarter, attended with heavy rain. In the course of the morning we saw another land-bird, and several flocks of petrels and gulls directing their course to the south-westward.

The heavy northeast swell, which had constantly been observed by us since we had passed Lopatka, now ceased, and suddenly changed to the southeast. On the 18th, in the forenoon, we saw considerable quantities of rock-weed, from which, as well as from the flights of birds already mentioned, we imagined that the southernmost of the Kurile Islands was at no great distance from us; and about the same time, the wind shifting to the southward, we were enabled to steer for it. At two o'clock we set studding sails, and stood to the westward; but, the wind augmenting to a gale, we were quickly obliged to double reef the top-sails; and, at mid-night, we deemed it necessary to examine our depth of water. We accordingly sounded; but, meeting with no ground at the depth of seventy-five fathoms, we again bore away to the west, with the wind in the southeast point.

This course we continued till two in the morning of the 19th, when the weather becoming thick and gloomy, we hauled our wind, and stood to the south-westward till five o'clock, at which time a violent storm reduced us to our courses. Though, from the unfavourable state of the weather, there was but little probability of our making the land,

our attention was still anxiously directed to this object; and, on the appearance of day-light, we ventured to steer west by south. We proceeded on the same course till ten o'clock in the forenoon, when the wind suddenly veered round to the south-west, and was accompanied with clear weather. Scarce had we availed ourselves of this, by letting out the reefs, and setting the top-sails, when it began to blow with such vehemence, that we were under the necessity of close-reefing again; and, about noon, the wind shifting more to the west, we were prevented from continuing any longer on this tack; we therefore put about, and stood towards the south.

our latitude, at this time, was 44° 12′, and our longitude 150° 40′; so that, after all our exertions, we had the mortification of finding ourselves, according to the Russian charts, upon the same meridian with Nadeegsda, which they represent as the most southerly of all the Kurile Islands, and about sixty miles to the southward.

Though the violent and adverse winds that we had met with for the last six days had deprived us of an opportunity of getting in with these islands, yet the course on which we had been obliged to proceed, did not prove altogether destitute of geographical advantages. For the group of islands, comprehending Zellany, Kunashir, and the Three Sisters, which, in the maps of Monsieur D'Anville, are laid down in the track we had just crossed, are, by this means, demonstrably removed from that position; and thus an additional proof is obtained of their being situate to the west, where captain Spanberg has placed them, between the longitudes of

142 and 147°. But this space being occupied, in the French charts, by Staten Island, and part of the land of Jeso, the opinion of Muller becomes highly probable, that they are all the same lands; and, as we have no reason to call in question the accuracy of Spanberg, we have, in our general map, re-instated Kunashir, Zellany, and the Three Sisters, in their proper situation, and have totally omitted the rest.

When we reflect on the manner in which the Russians have multiplied the islands of the Northern Archipelago, not only from the want of accuracy in ascertaining their real position, but likewise from the desire natural to mankind of propagating new discoveries, we shall not be surprised that the same causes should produce similar effects, It is thus that the lands of Jeso, which appear, as well from the earliest traditions among the Russians, as from the accounts of the Japanese, to be no other than the southern Kurile Islands, have been imagined to be distinct from the latter. De Gama's Land is next on record; and this was originally represented as being nearly in the same situation with those we have just mentioned; but it was afterwards removed, in order to make room for Staten Island and the Company's Land; and, as Jeso, and the most southerly of the Kuriles, had likewise possession of this space, that nothing might be lost, the former had a place provided for it to the westward, and the latter towards the east.

As, according to the Russian charts, the isles of Kunashir and Zellany, were still to the south, we entertained some hopes of being able to make them, and, with this view, kept our head towards

the west as much as the wind would permit. At twelve o'clock, on the 20th, our latitude was 43° 47', and our longitude 150° 30'. and we were then standing to the west by south, with a gentle breeze from the southeast, and, soon after, were, in all probability, not more than four and twenty leagues to the east of Zellany; but this good fortune was not of long duration; for, about three in the afternoon, the wind shifting to the northwest point, began to blow with such violence, that we were brought under our mizen stay-sail and fore-sail.

For the next twenty-four hours we had heavy rain and vehement squals; after which, the weather becoming moderate, and the horizon being in some measure clear, we were enabled to set our top-sails; but as the wind continued to blow from the northwest, all our attempts to make the land were rendered abortive, and we were at length obliged to relinquish all further thoughts of discovery to the northward of Japan. To this disappointment we submitted with the greater reluctance, as our curiosity had been considerably excited by the accounts that are given of the natives of these islands.

An accident befel the Resolution in the afternoon of the 21st; for the leach-rope of her fore top-sail gave way, and split the sail. As this had frequently happened during the life of captain Cook, he had, on such occasions, ordered the foot and leach-ropes of the top-sails to be taken out, and larger ones to be fixed in their room; and these likewise proving incapable of supporting the strain that was on them, it manifestly appears, that the just proportion of strength between the sail and

those hopes is extremely miscalculated in our service.

This day a land-bird, somewhat larger than a sparrow, but greatly resembling one in other respects, perched on our rigging, and was caught. The gale now gradually abated; so that, on Friday the 22d, in the morning, we let out the reefs of our top-sails, and carried more sail. Our latitude, at twelve o'clock, was 40° 58′, and our longitude 148° 17′; the variation 3° east.

During the afternoon, another land-bird pitched on one of our ships, and was so exhausted with fatigue, that it suffered itself to be taken instantaneously, and expired a few hours afterwards. Its size did not exceed that of a wren; it had on its head a tuft of yellow feathers, and the rest of its plumage was similar to that of a linnet. The bird that we mentioned before as bearing a resemblance to a sparrow, lived a long time after it was taken.

These birds affording clear indications that we were not at any very considerable distance from the land, and the wind, after varying for a little time, settled at the north point in the evening, our hopes of falling in with the land again revived, and we steered to the west-northwest; in which direction were situate, at the distance of about fifty leagues, the southermost islands, seen by captain Spanberg, and said to be inhabited by hairy men. The wind, however, did not keep pace with our wishes, but blew in such light airs, that we made little progress till about eight o'clock the following morning, when a fresh breeze sprung up from the south-southwest, with which we continued our course to the west-northwest till the evening. The latitude

at noon was 40° 35′, and the longitude, deduced from several lunar observations, was 146° 45′. The variation of the needle was 17′ east.

In the evening we had violent squally gales, accompanied with rain; and, as we had in the course of this day passed some patches of green grass, and observed a number of small land birds, a shag, and many flocks of gulls, we did not think it consistent with prudence, having all these signs of the vicinity of land, to stand on for the whole night. We therefore, about midnight, tacked, and, for the space of a few hours, steered to the southeastward.

On the 24th, at four in the morning, we again bore away to the west-northwest, and carried a press of sail till about seven o'clock in the evening, when the wind veered round from south-southwest to the north, and blew a fresh gale. Our longitude at this time was 145° 20′, and our latitude 40° 57′.

This second disappointment in our attempts to get to the north-westward, the tempestuous weather with which we had been harassed, and the small probability, at this season of the year, of its becoming more favourable to our designs, were the motives that now induced captain Gore finally to abandon all further search for the islands situate to the northward of Japan, and to direct his course to the west-southwest, for the northern part of that island.

The wind, during the night, shifted to the northeast, and blew a brisk gale; and, at the same time, we had heavy rain, and hazy weather. On the 25th, at noon, we were in the latitude of 40° 18′, and in the longitude of 144°. Flights of wild

ducks were this day observed by us; a pigeon lighted upon our rigging; and many birds, resembling linnets, flew about the ships with a degree of vigour that gave us reason to imagine they had not been long on the wing. We also passed a piece either of bamboo or sugar-cane, and several patches of long-grass. These indications of our being at no great distance from land, determined us to try our soundings; but we could not reach the bottom with ninety fathoms of line. On the approach of evening, the wind gradually veering round to south, with which we continued our course to the west-southwest.

On Tuesday the 26th, at break of day, we had the satisfaction of perceiving high land towards the west, which proved to be Japan. At eight o'clock, it was at the distance of ten or twelve miles, and extended from south by west to northwest. A low flat cape, which apparently constituted the southern part of the entrance of a bay, bore northwest three quarters west. Near the south extremity, a hill of a conic figure appeared, bearing south by west three quarters west. To the north of this hill there seemed to be an inlet of very considerable depth, the northern side of whose entrance is formed by a low point of land; and, as well as we were enabled to judge by the assistance of our glasses, has a small island near it towards the south.

Having stood on till nine o'clock, we had by that time approached within five or six miles of the land, which bore west three quarters south. Our depth of water was fifty-eight fathoms, with a bot-

tom composed of very fine sand. We now tacked, and stood off; but, as the wind failed us we had proceeded, at noon, to no greater distance from the shore than about three leagues. This part of the coast extended from northwest by north to south half east, and was principally bold and cliffy. The low cape above mentioned was about six leagues distant, bearing northwest by west; and the northern point of the inlet was in the direction of south three quarters west. Our latitude, by observation, was 40° 5′, and our longitude 142° 28′. The most northerly land in view, was supposed by us to be the northern extreme of Japan *. It is somewhat lower than the other parts; and, from the range of the elevated lands that were discerned over it from the mast-head, the coast manifestly appeared to trend to the westward. The northern point of the inlet was imagined by us to be Cape Nambu; and we conjectured that the town † stood in a break of the high land, towards which the inlet apparently directed itself. The neighbouring country is of a moderate elevation, and has a double range of mountains. It is well furnished with wood, and exhibits a pleasing variety of hills and dales. We perceived the smoke arising from several villages or

* The most accurate survey of the eastern coast of Japan appears to be that which was published by Jansen in his Atlas, and compiled with a great degree of exactness from the Journals and Charts of the Castricom and Breskes. We have, therefore, thought proper to adopt, wherever we could nearly ascertain the identity of the situations, the names affixed in Jansen's map to the corresponding headlands and points observed by us along the coast.

† Jansen calls this town Nabo.

towns, and saw many houses in delightful and cultivated situations, at a small distance from the shore.

While the calm continued, that we might lose no time, we put our fishing-lines overboard in ten fathoms water, but met with no success. This being the only diversion which our present circumstances permitted us to enjoy, we very sensibly felt the disappointment; and looked back with regret to the cod-banks of the dismal regions we had lately quitted, which had furnished us with so many salutary meals, and, by the amusement they afforded, had given a variety to the tedious recurrence of the same nautical and astronomical observations, and the wearisome succession of calms and gales.

At two o'clock in the afternoon the wind blew fresh from the south, and, by four, had reduced us to close reefed top-sails, and obliged us to stand off to the south-eastward, in consequence of which course, and the gloominess of the weather, we soon lost sight of land. We kept on during the whole night, and, till eight o'clock the following morning, when the wind shifting to the north, and becoming moderate, we made sail, and steered a west-south-west course towards the land, which, however, we did not make before three in the afternoon; at which time it was seen to extend from north-west half west to west. The most northerly extremity was a continuation of the elevated land, which was the southermost we had observed the preceding day. The land to the westward we conjectured to be the *Hofe Tafel Berg*, (or high Table Hill) of Jansen. The coast, betwixt the two extremes, was low, and

could scarcely be perceived, except from the mast-head.

We proceeded towards the coast till eight in the evening, when our distance from it was about five leagues; and having shortened sail for the night, we steered in a southerly direction, sounding every four hours; but our depth of water was so great, that we did not find ground with a hundred and sixty fathoms of line.

We again saw land on the 28th about six o'clock in the morning. It lay twelve leagues to the southward of that which we had seen the day before, and extended from west by north to west-south-west. Steering southwest obliquely with the shore, we saw, at ten o'clock, more land in that direction. To the west of this land, which is low and level, were two islands, as we supposed, though some doubts were entertained whether they were not united with the neighbouring low ground. The haziness of the weather, as well as our distance, rendered it likewise impossible for us to ascertain, whether there were not some inlets or harbours between the projecting points, which here seemed to promise tolerable shelter.

At noon, the northern extremity of the land in view bore northwest by north, and a lofty peaked hill, over a steep head-land, was fifteen or sixteen miles distant, bearing west by north.

Our present latitude, by observation, was 38° 16′, and our longitude 142° 9′. The mean of the variation was found to be 1° 20′ east.

The land disappeared from our view between three and four o'clock in the afternoon; and, from its breaking off so suddenly, we imagined that what

we had seen this day was an island, or, perhaps, a group of islands, situate off the main land of Japan; but, as the islands called by D'Anville Matsima, and by Jansen the Schilpads, though represented as being nearly in the same situation, are unequal in extent to the land seen by us, we must leave this point undetermined.

We continued our course to the southwest during the remainder of the day, and, at midnight, found our depth of water to be seventy fathoms, over a bottom of fine brown sand. We therefore hauled up towards the east, till the next morning, when we again had sight of land, about eleven leagues to the south of that which we had seen the preceding day. At eight o'clock we were within the distance of about two leagues from the shore, having had regular soundings from sixty-five to twenty fathoms, over gravel and coarse sand.

It unfortunately happened that there was a haze over the land, which prevented us from distinguishing small objects on it. The coast was straight and unbroken, running nearly in the direction of north and south. The ground was low towards the sea, but gradually swelled into hills of a moderate elevation, whose summits were pretty even, and covered with wood.

About nine o'clock, the sky being in some degree overcast, and the wind veering to the south, we tacked, and stood off to the eastward. Not long after, we observed a vessel, close in with the land, standing to the north along the shore; and we also saw another in the offing, coming down on us before the wind. The reader will easily conceive, that objects of any kind, belonging to a country

so celebrated, and yet so imperfectly known, must have excited a general eagerness of curiosity; in consequence of which, every person on board came instantaneously upon deck to gaze at them. As the vessel to windward approached us, she hauled off to a greater distance from the shore; upon which, being apprehensive of alarming those who were on board of her by the appearance of a pursuit, we brought our ships to, and she sailed a-head of us, at the distance of four or five furlongs. We might have spoken to them with great facility; but captain Gore, perceiving by their manœuvres, that they were highly terrified, was unwilling to increase their apprehensions; and imagining that we might have many better opportunities of communication with the Japanese, suffered them to retire without interruption.

We were not sufficiently near this vessel to remark any particulars respecting the men on board of her, who seemed to be six or seven in number, especially as the use of our glasses was precluded by the thickness of the weather. According to the most probable conjectures we were enabled to form, the vessel was of the burthen of about forty tons. She had only one mast, on which was hoisted a quadrangular sail, extended aloft by a yard, the braces of which worked forwards. Three pieces of black cloth came half-way down the sail, at an equal distance from each other. The vessel was lower in the middle than at each end; and, from her figure and appearance, we supposed that she could not sail otherwise than large.

The wind blew fresh at noon, and was accompanied with much rain. By three in the afternoon

it had increased in so great a degree, that we were reduced to our courses. The sea, at the same time, ran as high as any of our people ever remembered to have seen it.

If the vessels of the Japanese are, as Kœmpfer has described them, open in the stern, it would have been impossible for those which we saw, to have endured the violence of this storm; but, as the appearance of the weather, during all the former part of the day, had prognosticated its approach, and one of the sloops had, nevertheless, stood a considerable way out to sea, it may safely be inferred, that they are very capable of sustaining the fury of a gale of wind. Spanberg has, indeed, mentioned two sorts of Japanese vessels; one corresponding with Kœmpfer's description, while the other, which he denominates busses, and in which, he says, the natives make voyages to the adjacent islands, perfectly agrees with those that were seen by us.

About eight o'clock in the evening, the gale, without the smallest diminution of its violence, shifted to the west, and, by producing a sudden swell in a direction contrary to that which had before prevailed, caused our ships to strain and labour extremely. During the continuance of the storm, the Resolution had several of her sails split. They had, indeed, been bent for such a considerable time, and were worn so thin, that this accident had lately happened in both our vessels almost daily; particularly when the sails were stiff and heavy with rain, in which case they became less capable of bearing the shocks of the boisterous and variable winds we occasionally experienced.

The gale at length abating, and settling in the western quarter, we steered a southward course; and on Saturday the 30th, at nine o'clock in the morning, we saw the land, extending from west by north to northwest a quarter west, at the distance of fifteen or sixteen leagues. It showed itself in detached parts, but we were not near enough to ascertain whether they were small islands or parts of Japan.

At noon the land extended from west to north-west, and the nearest part of it was twelve or thirteen leagues distant, beyond which the coast appeared to run in a western direction. Our present latitude, by observation, was 36° 41′, and our longitude 142° 6′. The point to the north, which we imagined was near the southermost land seen the preceding day, was supposed by us to be Cape de Kennis; and the break to the south of this point, was thought to be the mouth of the river, on which the town named Gissima is said to stand. The next cape is, in all probability, that which is called Boomtje's Point in the Dutch charts; and the most southerly one, off which we were abreast at noon, we conjectured to be near Low Point (termed by Jansen *Lage Hoeck*, and placed by him in the latitude of 30° 40′), and that our distance was too great to admit of our seeing the low land, in which it probably terminates toward the east.

The wind, in the afternoon, shifting to the north-east, we stood to the south, at the distance of seventeen or eighteen leagues from the coast. As we passed along we tried for soundings, but did not find any ground with a hundred and fifty fathoms of line.

On the 31st, at two o'clock in the morning, the wind veered round to the west, and blew in violent squalls, accompanied with lightning and rain. In the course of this day several little birds of a brown plumage, resembling linnets, which had been driven off the land by the strong westerly gales, flew about our ships. On the approach of evening, the wind coming to the northwest point, we directed our course, with the birds, to the west-southwest, with a view of regaining the coast.

The next morning, which was the 1st of November, the wind shifted to the southeast, and was attended with fair weather; in consequence of which, we obtained, with four different quadrants, forty-two sets of distances of the moon from the sun and stars, each set comprehending six observations, These nearly coinciding with each other, fix, with great accuracy, our situation, at twelve o'clock this day, in the longitude of 141° 32'; the latitude, by observation, being 35° 17'. In our reckonings of the 31st of October, we found an error, with respect to latitude, of eight miles, and of seventeen in this day's computations; from which circumstance, as well as from our being much more to the east than we expected, we inferred, that there had been a violent current from the south-westward.

We again made the land towards the west, at two o'clock in the afternoon, at the distance of twelve or thirteen leagues. The most southerly land in view, which we imagined was White Point (or *White Hoeck*, placed by Jansen in the latitude of 35° 24'), bore west-southwest half-west. A hummock to the northward, which had an insular

appearance, bore north-northwest half west; and within this we discerned from the mast-head some low land, which we supposed to be Sand-down Point, called *Sanduynege Hoeck* by Jansen, who has placed it in the latitude of 35° 55′.

We steered for the land till between five and six, when we hauled our wind to the south. We observed, at this time, many Japanese vessels close in with the land, some standing along the shore, and others apparently occupied in fishing. We now descried to the westward a mountain of extraordinary height, with a round summit, rising far inland There is no high ground in the neighbourhood of it, the coast being of a moderate elevation, and, as far as the haziness of the horizon permitted us to judge, much broken and indented by small inlets. But, to the south of the hummock island above mentioned, there appeared, at a considerable distance up the country, a ridge of hills, which extended towards the mountain, and might perhaps join with it.

This being the most remarkable hill seen by us near the coast, we were desirous of ascertaining its precise situation; but as we had only gained this single view of it, we were obliged to content ourselves with such accuracy as our circumstances would admit of. Its latitude we judged to be 35° 20′, and its longitude 140° 26′, the latter being estimated by its distance from our ships at this time fifteen leagues.

As the coast of Japan is represented, in the Dutch charts, as extending nine or ten leagues to the southwest of White Point, we tacked at eight o'clock in the evening, and stood off to the east-

ward, with a view of weathering that point. We again tacked, at mid-night, to the south-westward, under the expectation of falling in with the coast to the south, but were surprised, at eight the next morning, to see the hummock at no greater distance than three leagues, in the direction of west-north-west. We were, at first, almost inclined to doubt the evidence of our senes, and afterwards began to suspect some deception from a resemblance of land; but, at noon, we found, by observation, that we were actually in the latitude of 35° 43′, at a time when, according to our reckonings, it was 34° 48′. It therefore appeared, that, during the eight hours in which we imagined we had proceeded nine leagues to the south-westward, we had really been carried eight leagues from the situation we left, in a totally opposite direction; which occasioned, upon the whole, a difference of seventeen leagues in our computation in that considerable space of time. From this error we estimated that the current had set at the rate of at least five knots an hour to the northeast by north. Our present longitude was 141° 16′.

As the weather had now a very threatening apperance, and the wind was at south-southeast, we thought it advisable to quit the neighbourhood of the shore, and stand off towards the east, that the ships might not be entangled with the land. We were not deceived in our prognostications; for, not long afterwards, a heavy gale began to blow, which continued till the succeeding day, and was attended with rainy and hazy weather.

On Wednesday the 3d, in the morning, we found ourselves, by our reckoning, at the distance of up-

wards of fifty leagues from the coast; which circumstance, united to the consideration of the very uncommon effect of currents we had already experienced, the advanced period of the year, the variable and uncertain state of the weather, and the small prospect we had of any alteration for the better, induced captain Gore to form the resolution of leaving Japan and prosecuting our voyage to China; particularly as he entertained hopes, that since the track he intended to pursue had not yet been explored, he might perhaps find an opportunity of making amends, by some new and important discovery, for the disappointments we had sustained upon this coast.

If any of our readers should be inclined to suppose that we relinquished this object too hastily, it may be observed, in addition to the facts before stated, that the coast of Japan, according to Kœmpfer's description of it, is the most dangerous in all the known world *; that it would have been exceedingly hazardous, in case of distress, to have run into any of the harbours of that country, where, if we may credit the most authentic writers, the aversion of the natives to a communication with strangers, has prompted them to the commission of the most flagrant acts of barbarity; that our vessels were in a leaky condition, that the rigging was so rotten as to require continual repairs, and that the sails were almost entirely worn out, and incapable of withstanding the vehemence of a gale of wind.

As the violent currents, which set along the

* Kœmpfer's History of Japan, vol. i. p. 92, 93, 94, and 102.

eastern shore of Japan may perhaps be attended with dangerous consequences to those navigators who are not acquainted with their extreme rapidity, we will here subjoin a summary account of their direction and force, as remarked by us from from the 1st day of November to the 8th of the same month. On the 1st, at a time when we were about eighteen leagues to the east of White Point, the current set at the rate of three miles in an hour, to the northeast and by north. On the 2d, as we made a nearer approach to the shore, we observed that it continued in a similar direction, but was augmented in its rapidity to five miles an hour. As we receded from the coast, it again became more moderate, and inclined towards the east. On the 3d, at the distance of sixty leagues from the shore, it set, at the rate of three miles an hour, to the east-northeast. On the two following days it turned to the southward, and at a hundred and twenty leagues from the coast its direction was southeast, and its rate did not exceed one mile and a half in an hour. It again, on the 6th and 7th, shifted to the northeast, and its force diminished gradually till the 8th, at which time we could no longer perceive any current.

We proceeded to the south-eastward during the 4th and 5th of November, with very unsettled weather, and much lightning and rain. On each of those days we passed considerable quantities of pumice-stone, some pieces of which were taken up by our people, and found to weigh from an ounce to three pounds. We imagined that these stones had been thrown into the water, by eruptions at different periods, as many of them were entirely bare,

and others covered with barnacles. At the same time we had a number of porpoises playing round our ships, and saw several small land-birds and two wild ducks.

At break of day on Saturday the 6th, we changed our course to the south-southwest; but about eight o'clock in the evening, we were taken back, and obliged to stand towards the southeast. The next day, at noon, we saw a small land-bird. At this time our latitude, by observation, was 33° 52′, and our longitude 148° 42′.

On the 9th we had a great swell from the east-southeast, and our longitude was 146° 20′, and latitude 31° 46′. In the course of this day we observed another little land-bird, a tropic bird, some flying fish and porpoises. The wind blowing from the northward, we continued to steer a southwest course, without any memorable occurrence, till Friday the 12th, when, from the same quarter, a most violent gale arose, which reduced us to the mizen stay-sail and fore-sail. The weather being at the same time so hazy that we could not see a cable's length before us, and a number of shoals and small islands being represented in our charts as lying in this part of the ocean, we brought to with our heads turned to the southwest. This day, at noon, our latitude, by account, was 27° 36′, and our longitude 144° 35′.

On the 13th, in the morning, the wind veered to the northwest point, and was accompanied with fair weather; but though we were at present nearly in the situation attributed to the island of St Juan, we perceived no appearance of land. We now bore away towards the southwest, and set our

top-sails, the gale still blowing with considerable violence. At twelve o'clock, our latitude, by observation, was 26°, our longitude 143° 40′, and the variation 3° 50′ east. In the afternoon we saw some albatrosses and tropic birds, also several dolphins and flying fish.

We continued to pass much pumice-stone; amazing quantities of which substance floating in the sea betwixt Japan and the Bashee Isles, give reason to suppose that in this quarter of the Pacific Ocean some great volcanic convulsion must have happened; and consequently afford some degree of probability to the opinion of Mr Muller (which we have mentioned in a former part of this chapter), relative to the separation of the continent of Jeso, and the disappearance of Staten Island and the Company's Land

About six o clock in the afternoon we steered to the south-southwest, captain Gore deeming it useless to stand any longer towards the south southwest, as we were nearly in the same meridian with the Ladrones or Marianne Islands, and at no very considerable distance from the track of the Manilla galleons

In the morning of Sunday the 14 h we had fine weather, and the wind, which blew moderately, shifted by degrees to the northeast point, and proved to be the trade-wind. At ten o'clock Mr Trevenen, one of the young gentlemen who accompanied captain King in the Discovery, after the death of captain Clerke, saw land in the direction of southwest, which had the appearance of a peaked mountain At noon the longitude was 142° 2′, and the latitude 24° 37′.

The land in view, which we now discovered to be an island, was nine or ten leagues distant, bearing southwest half west; and, at two o'clock in the afternoon, we descried another to the west-northwestward. This second island, when viewed at a distance, appears like two; the southern point consisting of a lofty hill of a conic figure, united by a narrow neck to the northern land, which is of a moderate elevation. This island being manifestly of greater extent than that to the southward, we directed our course towards it. At four o'clock it bore northwest by west; but, as we had not sufficient day-light to examine its coast, we stood, during the night, upon our tacks.

The next morning, at six, we made sail for the southern point of the larger island; and, about this time, discovered another high island, in the direction of north three quarters west; the island to the southward being on the same rhomb line, and the south extreme of the island a-head bearing west by north. At nine o'clock we were abreast of the middle island, and within the distance of a mile from it: but captain Gore, finding that a boat could not land without running some risk from the heavy surf that broke against the shore, continued his course to the westward. The latitude at noon, by observation, was 24° 50′, and the longitude 140° 56′.

The length of this island, in the direction of south-southwest, and north-northeast, is about five miles. Its south point is an elevated barren hill, rather flat at the summit, and when seen from the west-southwest, exhibits an evident volcanic crater. The sand, earth, or rock, (for it was difficult to

distinguish of which of these substances its surface was composed) displayed various colours; and we imagined that a considerable part was sulphur, not only from its appearance to the eye, but from the strong sulphureous smell perceived by us in our approach to the point. The Resolution having passed nearer the land, several of the officers of that ship thought they discerned streams proceeding from the top of the hill. These circumstances induced captain Gore to bestow on this discovery the appellation of Sulphur Island.

A low and narrow neck of land unites the hill we have just described with the south end of the island, which extends itself into a circumference of between three and four leagues. The part bordering on the isthmus has some bushes upon it, and presents an aspect of verdure; but those parts that are situate to the northeast are extremely barren, and abound with large detached rocks, many of which are of great whiteness. Some very dangerous breakers extend about two miles and a half to the eastward, and two miles to the westward of the middle part of the island, against which the sea breaks with a great degree of violence.

The north and south islands had the appearance of single mountains, of a considerable elevation; the former was peaked, and of a conic form; the latter more square and flat at the summit.

Sulphur island we judge to be in the latitude of 24° 48′, and the longitude of 141° 12′. The north island we place in the latitude of 25° 14′, and in the longitude of 141° 10′; and the south island in the latitude of 24° 22′, and the longitude of 141° 20′.

Captain Gore now thought proper to direct his course to the west-southwest, for the Bashee Isles, with hopes of procuring at them such a supply of refreshments as might render it less necessary to continue long at Macao. These islands received a visit from captain Dampier, who has given a very favourable account, as well of the civility of the natives, as of the abundance of hogs and vegetables with which the country is furnished. They were afterwards seen by commodore Byron and captain Wallis, who passed them without landing.

For the purpose of extending our view in the day time, our ships sailed at the distance of between two and three leagues from each other; and during the night we proceeded under an easy sail; so that it was scarcely possible to avoid observing any land that lay in the vicinity of our course. In this manner we continued our progress without any interesting occurrence, having a fresh breeze from the northeast, till Monday the 22d, when it augmented to a strong gale, with vehement squalls of wind and rain, which reduced us to close reefed top-sails.

The following day, at twelve o'clock, our latitude, by account, was 21° 5', and our longitude 123° 20'. About six in the afternoon, being at the distance of only one and twenty leagues from the Bashee Islands, according to their position in Mr Dalrymple's map, and the weather being squally, with a thick haze, we handed the fore-topsail, and hauled our wind towards the north-northwest.

On the 24th, we had constant rain during the whole day, and the weather was still very tempestuous; a heavy sea rolled down upon us from the northward; and, in the course of the afternoon we

had vivid flashes of lightning from the same quarter. We continued to stand to the north-northwest till nine, when we tacked, and steered to the south-southeastward till four o'clock in the morning of Thursday the 25th, at which time we wore. In the night there was an eclipse of the moon, but we were prevented by the rain from making any observation. It unfortunately happened that one of the Discovery's people, being occupied at the time of the greatest darkness in stowing the main-top-mast-stay-sail, fell overboard, but immediately catching hold of a rope, which was providentially hanging out of the fore-chains into the sea, and the ship being brought into the wind without delay, he was got on board with no other hurt than a trifling bruize on one of his shoulders.

The weather becoming clear at eight o'clock, we bore away, but the wind still blew with such violence, that we did not carry any other sail than the fore sail and the main-top-sail close reefed. We observed about this time a sugar-cane and a land-bird that resembled a thrush. At noon our longitude was 121° 35′, and our latitude 21° 35′.

Our present situation, with respect to longitude, being to the west of the Bashee Isles, according to Mr Dalrymple's charts, we perceived that captain Gore was influenced, in the course he was now steering, by the sentiments of commodore Byron and captain Wallis, with whom he had sailed when they passed these islands, which are placed by the former near four degrees to the westward, or in the longitude of 118° 14′. In consequence of this opinion, we stood towards the south at two o'clock in the afternoon, with an intention of getting into the same

parallel of latitude with the Bashees, before we should run down our longitude. We had nearly arrived in that situation by six o'clock, and ought, in consequence, to have been within sight of the land, according to the account of captain Wallis, who places these islands near three degrees more to the east than commodore Byron.

The fury of the gale had not at this time received the least diminution, and captain Gore being still of opinion that the Bashees were situate to the westward, brought the ships to, with their heads turned towards the northwest, under the fore-sail and balanced mizen.

On the 26th, about six in the morning, the wind having in a great measure abated, we set our top-sails, let out the reefs, and bore away to the west-ward. At twelve o'clock our latitude, by observation, was 21° 12', and our longitude 120° 25'. In the course of this day we saw many tropic birds and a flock of ducks; also porpoises and dolphins; and continued to pass several pumice-stones. We spent the night on our tacks; and the following morning, at six o'clock, we again made sail to the west, in search of the Bashee Isles.

Captain King began now to entertain apprehen-sions, lest, in the prosecution of our search for those islands, we should get so far to the south as to be under the necessity of passing to leeward of the Pratas: in which case it might have proved extremely difficult for such bad sailing vessels as ours to fetch Macao, especially if the wind should continue to blow (as it now did) from the north-north-east and north. The captain having some doubts whether Mr Dalrymple's maps were on board the

Resolution, made sail, and hailed her; and having informed captain Gore of the situation of these shoals, and his apprehensions of being driven too much to the southward, the latter gave him to understand that he should continue his course during that day, being still not without hopes of finding Mr Byron's longitude right; and therefore ordered captain King to spread a few miles to the south.

The weather at twelve o'clock became hazy: the latitude at that time was 21° 2', and the longitude 118° 30'. At six in the afternoon, having got to the west of the Bashee Islands, according to admiral Byron's account, captain Gore hauled the wind to the north-westward, under an easy sail, the wind blowing with great vehemence, and there being every prospect of a tempestuous night.

On the 28th, at four o'clock in the morning, the Resolution, which was then half a mile a-head of the Discovery, wore, and the crew of the latter ship, at the same time, perceived breakers close under the lee. On the approach of day-light we had sight of the island of Prata; and, between the hours of six and seven, stood towards the shoal, but finding ourselves unable to weather it, we bore away and ran to leeward. As we passed along the south side, within the distance of a mile from the reef, we saw two remarkable patches on the edge of the breakers, that had the appearance of wrecks.

At noon, the latitude discovered by double altitudes, was 20° 39', and the longitude was 116° 45'. The island of Prata was now three or four leagues distant, bearing north three quarters east. Near the southern extremity of the island, and on the southwestern side of the reef, we imagined that

we saw from the mast-head several openings in the reef, which seemed to promise secure anchorage.

The extent of the Prata shoal is considerable; for it is about six leagues from north to south, and extends three or four leagues to the east of the island; its limits to the westward we had not an opportunity of ascertaining. We judge its north-eastern extremity to be in the latitude of 20° 58′, and the longitude of 117°; and its southwest end we place in the latitude of 20° 45′, and the longitude of 116° 44′

We carried a press of sail during the remainder of the day, and kept the wind, which now blew from the northeast by north, in order to secure our passage to Macao It was a fortunate circumstance that the wind favoured us towards the evening, by veering two points more to the eastward; for, if the wind and weather had continued the same as they had been in the preceding week, we think we should scarcely have been able to have fetched that port, in which case we must have repaired to Batavia; a place we had good reason to dread, from the terrible havock which the unhealthiness of the climate had occasioned among the crews of the former vessels that had been employed in voyages of discovery, and had touched there.

In the morning of Monday the 29th, we passed some Chinese fishing-boats, the crews of which eyed us with marks of great indifference. In fishing they make use of a large dredge-net, resembling a hollow cone in shape, with a flat iron rim fixed to the lower part of its mouth. The net is fastened with cords to the head and stern of the boat, which, being left to follow the impulse of the wind, draws

the net after it, with the iron rim dragging along the bottom. We found the sea, to our great regret, covered with the wrecks of boats which had been lost as we supposed, in the late stormy weather.

Our latitude at twelve o'clock, by observation, was 22° 1'; and since the preceding noon we had run a hundred and ten miles upon a northwest course. As we were now nearly in the latitude of the Lema Islands, we made sail to the west by north, and, after we had proceeded two and twenty miles, descried one of them nine or ten leagues to the west.

At six in the afternoon the extremes of the islands in view were in the direction of north-northwest half west, and west-northwest half west; and we were four or five leagues distant from the nearest; our soundings being twenty-two fathoms, over a muddy bottom. We now slackened sail, and kept upon our tacks for the night. The Grand Lema, according to Mr Bayley's time-keeper, bore, from the island of Prata, north 60° west, a hundred and fifty-three miles; and, by our run, north 57° west, a hundred and forty-six miles.

The next morning we ran along the Lema Isles, which, like the other islands situate on this coast, are destitute of wood, and, as far as we had an opportunity of observing, devoid of cultivation. About nine o'clock a Chinese boat, which had before been with the Resolution, came along side the Discovery with offers of a pilot, which, however, captain King declined, as it was incumbent upon him to follow his consort. Not long afterwards we passed the westermost of the Lema rocks; but, instead of

hauling up to the north of the Grand Ladrone Island, as was done by Lord Anson in the Centurion, we sailed to leeward.

We scarcely think it necessary to caution the navigator against taking this course, as the danger is sufficiently manifest; for, if the wind should blow violently, and the current set with it, it will be highly difficult to fetch Macao. We might, indeed, by the direction of Mr Dalrymple's chart, have safely gone either between the Lema Islands, or entirely to the northward of them, and have had the wind favourable for our reaching Macao. From our apprehensions of missing that port, and being obliged to repair to Batavia, added to the strong and ardent desires of hearing intelligence from Europe, we were the more inclined to rejoice, on observing the Resolution soon after fire a gun, and display her colours as a signal for a pilot. On the repetition of the signal there was an excellent race between four Chinese boats; and captain Gore engaged with the person who arrived first, to conduct the ship to the Typa, for the sum of thirty dollars, sending word, at the same time, to captain King, that, as he could easily follow him with the Discovery, that expence might be saved to him.

In a short time afterwards, a second pilot getting on board the Resolution, insisted on guiding the ship; and immediately laying hold of the wheel, began to order the sails to be trimmed. This gave rise to a violent altercation, which was at length compromised, by their agreeing to divide the money between them.

At twelve o'clock our latitude, by observation, was 21° 57′ north, and our longitude 114° 2′ east.

The Grand Ladrone island was at this time four miles distant, extending from north-west half north to north half west. The land, whose bearings we have here mentioned, was supposed by us to be one island; but we afterwards found that the western part was an island laid down in Mr Dalrymple's chart of part of the Chinese coast, &c. which we had not at present on board.

In pursuance of the instructions which had been given to captain Cook by the Lords of the Admiralty, it now become necessary to desire the officers and men to deliver up their journals, and all other papers they might have in their possession, relative to the history of the voyage. Some degree of delicacy, as well as firmness, seemed to be requisite in the execution of these orders. Our commanders could not be ignorant that most of the officers and several of the seamen had amused themselves in their leizure hours with writing accounts of our proceedings, for the purpose of gratifying their friends, or for their own private satisfaction, which they might not wish to have submitted in their present form, to the inspection of strangers. On the other hand, the captains could not, consistently with the instructions they had received, leave papers in their custody, which, either by accident or design, might fall into the hands of printers, and thus give rise to such spurious and imperfect narratives of our voyage, as might tend to the disparagement of our labours, and, perhaps, to the prejudice of officers, who might, though unjustly, incur the suspicion of having been the authors of such publications.

Captain King, therefore, assembled the Discovery's people on deck, and informed them of the

orders that had been received, and the reasons which, in his opinion, ought to induce them to yield a perfect obedience. He, at the same time, gave them to understand, that whatever papers they wished not to have sent to the Lords of the Admiralty, should be sealed up in their own presence, and preserved in his custody till the intentions of their Lordships, respecting the publication of the history of the voyage, were accomplished; after which he said they should be faithfully restored to them.

Captain King had the satisfaction to find that his proposals met with the approbation and the ready compliance not only of the officers, but also of the rest of the ship's company; and every scrap of paper that contained an account of any transactions relating to the present voyage was immediately given up. The captain observes, upon this occasion, that it is but doing justice to the seamen of this ship to declare, that they were the best disposed, and the most obedient men he ever knew, though the greatest part of them were very young, and had never served before in a ship of war.

Captain Gore made the same proposals to the people of the Resolution, who instantly complied with them, and delivered up all their papers which had any reference to the voyage.

We continued working to windward till about six o'clock in the afternoon, when we let go our anchors, by the direction of the Chinese pilot on board the Resolution, who was of opinion that the tide was now setting against us. In this particular, however, he was greatly deceived; for, upon our making the experiment, we discovered that it set towards the north till ten o'clock. The next morn-

ing (Wednesday the 1st of December) he fell into an error of a similar kind; for, at five, on the appearance of slack water, he directed that we should get under way; but the ignorance he had before manifested had put us upon our guard. We were therefore willing to be convinced, by our own observations, before we weighed anchor; and, on examining the tide, we found a strong undertow, in consequence of which we were obliged to keep fast till eleven o'clock. It appears from these circumstances, that the tide had run down for the space of twelve hours.

We stood on our tacks, during the afternoon, between the Grand Ladrone and the island of Potoe, having passed to the east of the latter. The tide beginning to ebb at nine o'clock, we again cast anchor in six fathoms water; the town of Macao being at the distance of nine or ten miles, in a northwest direction, and the isle of Potoe bearing south half west, six or seven miles distant.

Potoe is situate about two leagues to the north-northwest of that island, which, as we have already mentioned, we at first considered as a part of the Grand Ladrone. It is rocky, and of small extent; and off its western extremity there is said to be foul ground, though, when we passed near it, we did not perceive any.

On the 2d of December, in the morning, one of the Chinese contractors, who are known by the appellation of *Compradors*, came on board the Resolution, and sold to captain Gore as much beef as weighed two hundred pounds, together with a considerable quantity of eggs, oranges, and greens. The Discovery received a proportional share of

these articles; and an agreement was made with the *Comprador* to provide us a daily supply; for which, however, he insisted on our paying him beforehand.

As our pilot now pretended that he could conduct the ships no further, captain Gore was under the necessity of discharging him; and we were left to our own guidence and direction. At two o'clock in the afternoon, the tide flowing, we took up our anchors, and worked to windward; and, at seven, anchored again in three fathoms and a half of water; at which time Macao bore west, at the distance of one league. This was, indeed, a very ineligible situation; for it was exposed to the north-east, and had shoal water, not exceeding two fathoms and a half in depth, to leeward; but as, in the narrative of Lord Anson's voyage, no nautical description is given of the harbour wherein the Centurion anchored, and Mr Dalrymple's general map was on too small a scale to be of much service in directing us, our ships were obliged to continue there during the whole night.

Captain Gore, in the evening, dispatched captain King to Macao, to pay a visit to the Portuguese governor, and to request the favour of his assistance in supplying our people with provisions, which we imagined might be done on more moderate terms than the *Comprador* would undertake to furnish them. Captain King, at the same time, took an account of the navel stores, of which both our ships were in great want, with an intention of repairing immediately to Canton, and making application to the servants of our East-India Company, who resided there at that time.

Upon Mr King's arrival at the citadel, he was informed by the fort-major, that the governor was indisposed, and was therefore unwilling to receive visitors, but that we might depend on meeting with every assistance in their power. This, however, Mr King understood would be very inconsiderable, since they were perfectly dependent on the Chinese, even for their daily support. Indeed, the answer that was returned to Mr King's first request, furnished a sufficient proof of the reduced state of the Portuguese power; for, on his signifying to the major his desire of proceeding to Canton as soon as possible, the latter acquainted him that they could not presume to provide a boat for him till permission had been obtained from the *Hoppo*, or officer of the customs; and that it was necessary to apply, for this purpose, to the Chinese goverment at Canton.

Captain King's mortification at so unexpected a delay could be equalled only by the eager impatience with which he had so long waited for an opportunity of gaining information with respect to European affairs. It not unfrequently happens, that, amidst the ardent pursuit of an object, we neglect the most obvious means of attaining it. This was, indeed, Mr King's case at present; for he was returning to the ship in a state of great dejection, when the Portuguese officer, who accompanied him, asked him whether he did not intend to visit the English gentlemen at Macao. It is unnecessary to add with what transport Mr King received the intelligence conveyed to him by this question; as well as with what anxious hopes and fears, what a conflict between curiosity and apprehension his

mind was agitated, as he and his companions walked towards the house of one of their countrymen. The reception they met with was by no means deficient in civility or kindness, though, from the state of agitation they were in, it appeared to them rather cold and formal. In their inquiries, as far as regarded objects of private concern, they obtained, as was indeed to be expected, little or no satisfaction; but the occurrences of a public nature, which had happened since the period of our departure from England, and which now, for the first time, burst all at once upon them, overwhelmed all other feelings, and almost deprived them, for some time, of the power of reflection.

The information now received by Mr King and his attendants, being communicated to those who remained on board, we continued, for several days, to question each other with respect to the truth of it, as if desirous of seeking, in doubt and suspence, for that consolation which the reality of our misfortunes seemed entirely to exclude. To these sensations the most poignant regret succeeded, on finding ourselves cut off, at so great a distance, from the scene where, we supposed, the fate of contending fleets and armies was continually deciding.

The intelligence we had gained concerning the state of affairs in Europe, rendred us the more anxious to accelerate our departure as much as we possibly could. Captain King, therefore, renewed his endeavours to procure a passage to Canton, but did not meet with success at present. He was now informed, that the difficulty arising from the settled policy of the country, would, in all probability, be greatly augmented by an incident which had oc-

curred a few weeks before our arrival. Captain Panton had been sent from Madras in a ship of war of twenty-five guns, called the Seahorse, for the purpose of urging the payment of a debt which the Chinese merchants of Canton owed to private British subjects in Europe and India, and which amounted, as we understood, to almost a million Sterling, including the principal and compound interest. With this view, he was directed to make a peremptory demand of an audience of the viceroy of Canton, which, after some delay, and not before recourse had been had to menaces, was at length granted. The answer he received, with regard to the subject of his mission, was fair and satisfactory: but he had no sooner departed, than an edict was stuck up in the public places of the city, and on the houses of the Europeans, prohibiting all foreigners from lending money, on any pretence whatever, to the subjects of the emperor of China.

This procedure had given occasion for very serious alarms at Canton. The Chinese merchants, who had contracted the debt, in opposition to the commercial laws of their country, and partly denied the justice of the demand, were apprehensive lest some intelligence of this should be conveyed to Pekin; in which case the emperor, who is represented as a just and rigid prince, might perhaps punish them with the confiscation of their property, if not with the loss of their lives. On the other hand, the Select Committee at the English factory, to whom the Presidency of Madras had recommended, in strong terms, the cause of the claimants, entertained violent apprehensions of embroiling themselves with the Chinese government at Canton, and of occa-

sioning, by that means, great and perhaps irreparable detriment to the East-Inda Company's affairs in China For the Mandarines, as captain King was further informed, were constantly prepared to take occasion, even on the most trivial grounds, to obstruct their commerce ; and, it was frequently a very difficult matter, and always attended with expence, to get such restraints taken off. These impositions were continually augmenting, and indeed, Mr King found it the general opinion, in all the European factories, that they should, probably, in a short time, be reduced to the mortifying alternative, either of quitting their commercial intercourse with China, or enduring the same indignities to which the Dutch are subjected in the Japanese dominions.

The arrival of our two ships, at such a time, could not fail of giving rise to fresh alarms. Captain King, therefore, finding there was no prospect of his proceeding to Canton, dispatched a letter to the Committee of the English Supercargoes, to inform them of the reason of our putting into the Tygris, and to request their assistance in procuring him a passport, as well as in forwarding the stores we had occasion for (of which Mr King sent them a list) with all possible expedition.

The following morning captain King was accompanied on board by our countrymen ; who acquainting us with the situation of the Typa, we weighed anchor between six and seven o'clock, and steered towards it ; but the wind failing, we again came to at eight, in three fathoms and a half ; the Grand Ladrone bearing southeast by south, and

Macao west-northwest, at the distance of three miles.

The Portuguese fort was here saluted by the Resolution with eleven guns, and the compliment was returned by an equal number. Early in the morning of the 4th, we weighed again and stood into the Typa, where we moored with the stream anchor and cable to the west.

As the *Comprador*, with whom we at first engaged, had taken the liberty of getting off with a small sum of money, which he had received from us beforehand for the purchase of provisions, we entered into an agreement with another, who supplied both our vessels during the whole time of our continuance here. This was done with secrecy, and in the night, on pretence of its being contrary to the established regulations of the port; but we were inclined to suspect that all this caution was practised either with a view of enhancing the price of the articles provided by him, or of securing to himself the emoluments of his contract, without being under the necessity of sharing them with the Mandarines.

On Thursday the 9th, captain Gore received an answer from the English Supercargoes at Canton, in which they promised to exert their most strenuous endeavours in procuring the supplies of which we were in want, with all possible dispatch, and assured him that a passport should be sent for one of our officers, expressing their hopes, at the same time, that we were sufficiently acquainted with the character of the Chinese administration, to impute any delays that might unavoidably occur to their true cause.

The next day, an English merchant, from one of the East-Indian settlements, made application to captain Gore for the assistance of a few of his people to navigate as far as Canton a vessel which he had purchased at Macao. Captain Gore, considering this as a good opportunity for Mr King to repair to that city, gave orders that he should take with him, his second lieutenant, lieutenant of marines, and ten sailors.

Though this was not the exact mode in which captain King could have wished to visit Canton, yet as it was highly uncertain when the passport would arrive, and his presence might be of great service in expediting the requisite supplies, he did not scruple to go on board the vessel, having left orders with Mr Williamson to prepare the Discovery for sea with all convenient speed, and make such additions and improvements in her upper works, as might contribute to render her more defensible. That the series of our astronomical observations might not be interrupted by his absence, he intrusted Mr Trevenen with the care of continuing them; as he reposed a perfect confidence in the abilities and assiduity of that gentleman.

Mr King and his attendants quitted the harbour of Macao on Saturday the 11th; and sailing round the southeastern extreme of the island, steered a northerly course, leaving on their right hand, as they passed along, Lantao Lintin, and several isles of smaller extent. All these islands, as well as that of Macao, which is situate to the left, are totally destitute of wood: the land is high and unfertile, and is not inhabited, except occasionally by fishermen.

As they approached the Bocca Tygris, which is near forty miles distant from Macao, the coast of China appeared to the eastward in steep white cliffs. The two forts that command the mouth of the river, were at this time exactly in the same state they were when Lord Anson was here. That which stands to the left is a fine old castle, environed by a grove of trees, and has a pleasing and romantic aspect.

The vessel was here visited by an officer of the customs; upon which occasion, the person to whom it belonged being apprehensive that, if our party should be discovered on board, it would produce some alarm, and might perhaps be attended with some disagreeable consequences, requested them to retire into the cabin below.

Above these forts the breadth of the river is variable, the banks being flat and low, and subject to great inundations from the tide. The land, on both sides, is level, and laid out in fields of rice; but, as our party advanced, it was observed to rise gradually into hills of considerable declivity, whose sides were cut into terraces, and planted with sugar-canes, yams, sweet potatoes, the cotton-tree, and plantains. They also perceived many lofty *pagodas* dispersed about the country, and several towns at a distance, some of which seemed to be of great magnitude.

Their progress being retarded by contrary winds and the lightness of the vessel, they did not arrive at Wampu, which is no more than nine leagues from the Boca Tygris, till the 18th. Wampu is a small town, off which the ships of the various nations, who trade with the Chinese are stationed, in order

to receive their respective ladings. It is asserted by Monsieur Sonnerat, that the river, higher up, is not sufficiently deep for the admission of vessels that are heavily laden, even if the policy of the Chinese had permitted Europeans to navigate them up to Canton. With respect to this circumstance, however, we cannot pretend to decide, as no stranger, we believe, has been allowed to inform himself with certainty of the truth. The little islands that are situate opposite the town are appropriated to the several factories, who have erected warehouses for the reception of the various articles of merchandise which are brought down from Canton.

At Wampu captain King embarked in a *sampane*, or Chinese boat, and immediately proceeded to Canton, which is eight or nine miles higher up the river. These *sampanes* are the neatest and most commodious boats for passengers that Mr King ever saw. They are of different sizes, of great breadth upon the beam, nearly flat at the bottom, and narrow at the head and stern, which are elevated, and embellished with ornaments. The middle part, where Mr King sat, was arched over with a roof made of bamboo, which may at pleasure, be raised or lowered; in the sides were small windows, which had shutters to them; and the apartment was furnished with tables, chairs, and handsome mats. A small waxen idol was placed in the stern, in a case of gilt leather. Before this image stood a pot that contained lighted tapers made of matches, or dry chips and gum. The fare of this boat amounted to a spanish dollar.

Captain King reached Canton in the evening, and disembarked at the English factory, where,

though his arrival was wholly unexpected, he was received with every mark of civility and respect. Messrs Fitzhugh, Bevan, and Rapier, composed, at this time, the Select Committee; and the former of these gentlemen acted as President. They immediately gave Mr King an inventory of those stores with which the East-India ships were able to supply us; and though he did not entertain the smallest doubt that the commanders were willing to assist us with whatever they could spare, consistently with a regard to the interest of the employers, as well as their own safety, yet it was a great disappointment to him to observe in their list scarcely any canvass or cordage, of both which articles we were chiefly in want. It afforded him, however, some consolation to find that the stores were ready to be shipped, and that the provisions we had occasion for might be had at a day's notice.

Mr King, being desirous of making his stay here as short as possible, requested that the gentlemen would endeavour to procure junks or boats for him the next day, as it was his intention to quit Canton the following one: but they gave him to understand, that a business of that nature was not to be transacted with such quickness in the Chinese dominions; that leave must previously be obtained from the Viceroy; that application must be made to the *Hoppo*, or principal officer of the customs for *chops*, or permits; and that it was not customary to grant such favours without mature deliberation: in short, that patience was a virtue essentially necessary in China; and that they hoped they should have the pleasure of rendering the factory agreeable

to him, for a few days longer than he seemed inclined to favour them with his company.

Though captain King was not much disposed to be pleased with this compliment, he could not avoid being diverted with an incident which occurred very seasonably to convince him of the truth of their representations, and of the suspicious character that distinguishes the Chinese. Our readers will doubtless recollect, that it was now upwards of a fortnight since captain Gore had written to the gentlemen of the factory, to solicit their assistance in gaining permission for one of his officers to repair to Canton. In consequence of this application they had mentioned the affair to one of the principal Chinese merchants of that city, who had promised to interest himself in our behalf, and to petition the Viceroy to grant our request. This person came to visit Mr Fitzhugh, the President, while he and his colleagues were conversing with captain King on the subject, and informed him, with great complacency and satisfaction in his countenance, that he had at length met with success in his solicitations, and that a passport would be issued in a few days for one of the officers of the Ladrone ship, or pirate. Mr Fitzhugh immediately desired him not to give himself any further trouble in this business, as the officer (pointing to captain King) was already arrived. The consternation with which the old Chinese merchant was seized on hearing this intelligence, is almost inconceivable. His head sunk instantaneously upon his breast, and the sofa, on which he sat, shook, from the violence of his emotion. Whether the Ladrone ship (as he called it) was the object of his apprehensions, or his own

government captain King could not determine; but, after he had continued a few minutes in this state of agitation, Mr Bevan begged him not to despair, and acquainted him with the manner in which the captain had passed from Macao, the motives of his journey to Canton, and his wishes to quit that city as soon as possible. As this last circumstance seemed to be particularly agreeable to the old man, Mr King flattered himself that he should find him disposed to accelerate his departure, but he had no sooner recovered from his consternation, than he began to recount the unavoidable delays that would occur in our business, the difficulty of obtaining an audience of the Viceroy, the jealousies and suspicions entertained by the Mandarines with regard to our real designs, which, he affirmed, had risen to an uncommon height, from the strange account that we had given of ourselves.

After captain King had waited several days, with great impatience, for the issue of his negociation, without finding that the affair was in the least advanced towards a conclusion, he made application to the commander of an English country ship, who intended to sail on the 25th, and who offered to take on board the men and stores, and to lie to, unless the weather should prevent him, off Macao, till we could dispatch boats to receive them out of his vessel. He at the same time apprised captain King of the danger he might perhaps incur of being driven with them out to sea.

While Mr King was considering what steps he should take, the commander of another country ship presented him with a letter from captain Gore, importing that he had engaged this commander to

bring our party from Canton, and to deliver our supplies, at his own hazard, in the Typa. All difficulties being then removed, Mr King had leisure to bestow some attention on the purchase of our stores and provisions which he completed on the 26th; and, on the succeeding day, the whole stock was conveyed on board.

Captain Gore being of opinion that Canton would be the most advantageous market for furs, had desired Mr King to take with him about twenty skins of sea-otters; most of which had been the property of our deceased commanders, and to dispose of them at the best price he could obtain; a commission which furnished him with an opportunity of becoming acquainted, in some degree, with the genius of the Chinese for trade. Mr King having informed some of the English supercargoes of these circumstances, requested that they would recommend him to some reputable Chinese merchant, who would at once offer him a reasonable price for the skins. They accordingly directed him to a member of the *Hong*, (an appellation given to a society of the principal merchants of the city) who being fully apprised of the nature of the business, seemed to be sensible of the delicacy of Mr King's situation, and assured him that he might rely on his integrity, and that, in an affair of this kind, he should consider himself as a mere agent, without seeking to acquire any profit for himself.

The skins being laid before this merchant, he examined them over and over again with particular attention, and at last informed captain King that he could not think of offering more than three hundred dollars for them. As the captain was

convinced, from the price at which our skins had been sold in Kamtschatka, that he had not offered one half of their value, he found himself obliged to drive a bargain. He therefore, in his turn, demanded a thousand dollars; the Chinese merchant then advanced to five hundred; after which he offered Mr King a private present of porcelain and tea, which amounted to a hundred more; then he proposed to give the same sum in money; and at length rose to seven hundred dollars; upon which the captain lowered his demands to nine hundred. Here, each of them declaring that he would not recede, they parted; but the Chinese speedily returned with a list of East-Indian commodities, which he now desired that Mr King would take in exchange, and which (as the captain was afterwards informed) would have amounted in value, if faithfully delivered, to double the sum the merchant had before offered. Finding the captain unwilling to deal in this mode, he finally proposed that they should divide the difference, which Mr King, weary of the contest, agreed to, and received the eight hundred dollars.

Captain King, from the ill health under which he at present laboured, had but little reason to lament the very narrow bounds, within which every European at Canton is obliged, by the suspicious policy of the Chinese, to confine his curiosity. He would otherwise, doubtless, have felt himself extremely tantalized with living under the walls of a city of such magnitude, and so replete with objects of novelty, without being permitted to enter it.

The accounts of Canton, as well as of the other parts of China, by Le Comte and Du Halde, most of our readers have, in all probability, perused. These authors have lately been charged by Monsieur Sonnerat with having been guilty of great exaggeration; for which reason the subsequent remarks, collected by captain King from the intelligence which he received from several English gentlemen, who had resided a long time at Canton, may not improperly be introduced.

The circumference of Canton, including the old and new town, and also the suburbs, is about ten miles. With regard to its population, Mr King, judging of the whole from what he saw in the suburbs, is of opinion, that it falls considerably short of an European town of equal magnitude. Le Comte has estimated the number of its inhabitants at one million five hundred thousand; Du Halde at a million; and M. Sonnerat affirms he has ascertained that their number does not exceed seventy-five thousand*: but, as this gentleman has not thought proper to communicate to us the grounds on which he founded his calculation, and, besides, seems to be as much inclined to depreciate whatever relates to the Chinese nation, as the Jesuits may be to magnify, his opinion does not lay claim to an implicit assent. The following particulars may perhaps enable our readers to form a judgment on this point with some degree of accuracy.

It is certain, that a Chinese house, in general,

* "J'ai *verifié* moi-meme, avec plusieurs Chinois, la population de Canton," &c. *Voyage aux Indes Orientales, et à la Chine, par M. Sonnerat*, vol. ii. b. 14.

occupies more space than is commonly taken up by houses in Europe; but the proportion of four or five to one, suggested by M. Sonnerat, must be acknowledged to go far beyond the truth. To this we may add, that a considerable number of houses, in the suburbs of Canton, are kept only for the purposes of commerce, by merchants and opulent tradesmen, whose families reside entirely within the walls. On the other hand, a Chinese family, upon an average, is more numerous than an European. A Mandarine, in proportion to his rank and property, has from five to twenty wives. A merchant has from three to five. A person of the latter class at Canton, had, indeed, five and twenty wives, and six and thirty children; but this was mentioned to captain King as a very uncommon circumstance. A wealthy tradesman has generally two wives; and people of an inferior station very rarely have more than one. They have, at least, double the number of servants employed by Europeans of the same rank. If, therefore, we suppose a Chinese family to be larger by one-third, and an European house less by two-thirds, than each other, a city of China will comprehend only half the number of people contained in a town of the same extent in Europe. According to these *postulata*, the city and suburbs of Canton may contain, in all probability, about a hundred and fifty thousand inhabitants.

Captain King found various opinions entertained respecting the number of inhabited *sampanes*: but none computed them to be under forty thousand. They are moored in rows, close to each other, a narrow passage being left at intervals, for the boats

to pass and repass on the river. The Tygris, at Canton, being of greater width than the Thames at London, and the whole river, for the space of at least a mile, being covered in this manner, it does not appear that this estimate of their number is at all exaggerated; and if it be allowed, the inhabitants in the *sampanes* alone, each of which contains one family, must amount to almost thrice the number affirmed by M. Sonnerat to be in the whole city.

Fifty thousand men constitute the military force of the province of Quangtong, of which Canton is the capital. It is asserted, that twenty thousand are stationed in the city and its environs; and captain King was assured, that, on occasion of some commotion which had happened at Canton, thirty thousand troops had been drawn together in the course of a few hours.

The streets of this city are long, and most of them are narrow and destitute of uniformity. They are well paved with large stones, and, in general, kept extremely clean. The houses are built of brick, and are only one storey high. They have, for the most part, two or three courts backwards, in which are erected the ware-houses for the reception of merchandise, and, in the houses within the city, the apartments for the females. Some of the meaner sort of people, though very few, have their habitations composed of wood.

The houses of the European factors are built on a fine quay, having a regular facade of two storeys towards the river. They are constructed, with respect to the inside, partly after the Chinese, and partly after the European mode. Adjoining to

these are a considerable number of houses which belong to the Chinese, and are let out by them to the commanders of vessels, and to merchants who make only an occasional stay.

As no European is permitted to take his wife with him to Canton, the English supercargoes live together, at a common table, which is maintained by the company; and each of them has also an apartment appropriated to himself, consisting of three or four rooms. The period of their residence rarely exceeds eight months in a-year; and as, during that time, they are almost constantly occupied in the service of the company, they may submit, with the less uneasiness and regret, to the restrictions under which they live. They very seldom make any visits within the walls of Canton, except on public occasions. Indeed nothing contributed more to give captain King an unfavourable opinion of the character of the Chinese, than his finding, that among so many persons of ingenious and liberal minds, as well as of amiable manners, several of whom had been resident in that country for near fifteen successive years, they had never formed any social connection or friendship.

As soon as the last ship departs from Wampu, they are all under the necessity of retiring to Macao; but they leave behind them all the money they possess in *specie*, which, Mr King was informed, sometimes amounts to a hundred thousand pounds Sterling, and for which they have no other security than the seals of the Viceroy, the Mandarines, and the merchants of the *Hong:* a striking proof of the excellent police maintained in China.

Captain King, during his continuance at Canton, accompanied one of the English gentlemen on a visit to a person of the first distinction in the place. They were received in a long room or gallery, at the further end of which a table was placed, with a large chair behind it, and a row of chairs extending from it, on both sides, down the room. The Captain having been previously instructed, that the point of politeness consisted in remaining unseated as long as possible, readily submitted to this piece of *etiquette*; after which he and his friend were treated with tea, and some fresh and preserved fruits. Their entertainer was very corpulent, had a dull heavy countenance, and displayed great gravity in his deportment. He had learned to speak a little broken English and Portuguese. After his two guests had taken their refreshment, he conducted them about his house and garden; and when he had shown them all the improvements he was making, they took their leave.

Captain King being desirous of avoiding the trouble and delay that might attend an application for passports, as well as of saving the unnecessary expence of hiring a *sampane*, which he was informed amounted at least to twelve pounds Sterling, had hitherto designed to go along with the supplies to Macao, in the country merchant's ship we mentioned before: but receiving an invitation from two gentlemen, who had found means to procure passports for four, he accepted, together with Mr Phillips, their offer of places in a Chinese boat, and entrusted Mr Lannyon with the superintendance of the men and stores, which were to sail the following day.

On Sunday the 16th, in the evening, captain King took his leave of the supercargoes, after having returned them thanks for their many favours; among which must be mentioned a present of a considerable quantity of tea, for the use of the companies of both ships, and a copious collection of English periodical publications. The latter proved a valuable acquisition to us, as they not only served to beguile our impatience in the prosecution of our tedious voyage homewards, but also enabled us to return not wholly unacquainted with what had been transacting in our native country during our absence.

At one o'clock in the morning of the 17th, Messrs King and Philips, and the two English gentlemen, quitted Canton, and, about the same hour of the succeeding day, arrived at Macao, having passed down a channel situate to the west of that by which Mr King had come up.

During the absence of our party from Macao, a brisk traffic had been carrying on with the Chinese for our sea-otter skins, the value of which had augmented every day. One of our sailors disposed of his stock alone, for eight hundred dollars; and a few of the best skins, which were clean, and had been carefully preserved, produced a hundred and twenty dollars each. The total amount of the value, in goods and cash, that was obtained for the furs of both our vessels, we are confident, was not less than two thousand pounds Sterling; and it was the general opinion, that at least two-thirds of the quantity we had originally procured from the Americans, were by this time spoiled and worn out, or had been bestowed as presents, and other-

wise disposed of in Kamtschatka. If, in addition to these facts, we consider, that we at first collected the furs without having just ideas of their real value; that most of them had been worn by the savages from whom we purchased them; that little regard was afterwards shown to their preservation; that they were frequently made use of as bed-clothes, and likewise for other purposes, during our cruise to the northward; and that, in all probability, we never received the full value for them in China; the benefits that might accrue from a voyage to that part of the American coast where we obtained them, undertaken with commercial views, will certainly appear of sufficient importance to claim the public attention.

So great was the rage with which our seamen were possessed to return to Cook's River, and there procure another cargo of skins, by which they might be enabled to make their fortunes, that, at one time, they were almost on the point of proceeding to a mutiny. And captain King acknowledges, that he could not refrain from indulging himself in a project, which was first suggested to him by the disappointment we had met with in being compelled to leave the Japanese archipelago, as well as the northern coast of China, unexplored; and he is of opinion, that this object may still be happily attained, by means of our East-India Company, not only with trifling expence, but even with the prospect of very beneficial consequences. The state of affairs at home, or perhaps greater difficulties in the accomplishment of his plan than he had foreseen, have hitherto prevented its being carried into execution; but, as the scheme seems to be

well contrived, we hope the reader will not be displeased with our inserting it here.

In the first place, captain King proposes, that the East-India Company's China ships should, each, carry an additional number of men, making one hundred in the whole. Two vessels, one of two hundred tons, and the other of a hundred and fifty, might, with proper notice, (as Mr King was informed) be purchased at Canton; and, as victualling is as cheap there as in Europe, he has calculated that they might be completely equipped for sea, with one year's provisions and pay, for the sum of six thousand pounds, including the purchase. The expence of the requisite articles for barter is very inconsiderable.

Mr King particularly recommends that each of the ships should have a forge, five tons of unwrought iron, and a skilful smith, with an apprentice and journeyman, who might occasionally make such tools as the Indians should appear to have the greatest inclination for possessing. For, though half a dozen of the finest skins, obtained by us, were purchased with twelve large green glass beads, yet it is very certain, that the fancy of these people, for ornamental articles, is extremely capricious and variable; and that the only sure commodity for their market is iron. To this might be added several bales of coarse woollen cloth, two or three barrels of glass and copper trinkets, and a few gross of large pointed case-knives.

The captain proposes two vessels, not only for the greater security of the voyage, but because single ships ought never, in his opinion, to be sent out for the purpose of discovery. For where risks

are frequently to be run, and uncertain and dangerous experiments tried, it can by no means be expected that single ships should venture so far, as where some security is provided against an unfortunate accident.

When the ships are prepared for sea, they will sail with the first southwest monsoon, which usually sets in about the commencement of the month of April. They will steer a northward course, with this wind, along the Chinese coast, beginning to make a more accurate survey from the mouth of the Nankin river, or the river Kyana, in the 30th degree of latitude, which is supposed to be the remotest limit of this coast hitherto visited by European vessels.

The extent of the great gulph called *Whang Hay*, or the Yellow Sea, being at present unknown, it may be left to the commander's discretion, to proceed up it as far as he may think proper: he must be cautious, however, not to entangle himself in it too far, lest he should not have sufficient time left for the prosecution of the remainder of his voyage. The same discretion may be used when he has reached the straits of Tessoi, with regard to the islands of Jeso, which, if the wind and weather should be favourable, he must not neglect to explore.

Having arrived in the latitude of 51° 40', where he will make the most southerly point of the isle of Sagaleen, beyond which we have a considerable knowledge of the sea of Okotsk, he will steer towards the south, probably about the beginning of June, and exert his endeavours to fall in with the most southern of the Kurile islands. If the ac-

counts of the Russians may be depended on, Coroop, or Nadeschda, will furnish the ships with a commodious harbour, where they may recruit their wood and water, and provide themselves with such refreshments as the place may afford.

About the end of June the commander will direct his course to the Shummagins, whence he will proceed to Cook's River, purchasing, in his progress, as many skins as possible, without losing too much time, since he ought to sail again to the southward, and trace the coast with the utmost accuracy between the 56th and 50th degrees of latitude, the space where contrary winds drove us out of sight of land.

It must here be observed, that captain King considers the purchase of skins, in this expedition, as a secondary concern, for defraying the expence; and, from our experience in the present voyage, there is no reason to doubt that two hundred and fifty skins, each worth a hundred dollars, may be obtained without loss of time;* particularly as they will, in all probability, be met with along the coast to the south of Cook's River.

The commander, after having continued about three months on the American coast, will set out on his return to China in the former part of October, taking care, in his route, to avoid, as much as possible, the tracks of preceding navigators. All that remains to be added on this subject, is, that if the fur trade should become an established object of Indian commerce, many opportunities will occur of completing whatever may have been left unfinished, in the voyage of which the outlines are here delineated.

A very ludicrous alteration took place in the dress of all our crew, in consequence of the barter which the Chinese had carried on with us for our sea-otter skins. On our arrival in the Typa, not only the sailors, but likewise the younger officers were extremely ragged in their apparel; for, as the voyage had now exceeded, almost by a year, the time it was at first supposed we should continue at sea, the far greater part of our original stock of European clothes had been long ago worn out, or repaired and patched up with skins, and the different manufactures we had met with in the course of the expedition. These were now mixed and eked out with the gayest silks and cottons that China could produce.

Mr Lannyon arrived on the 30th, with the stores and provisions, which, without delay, were stowed in due proportion on board of our two vessels. The following day, in compliance with an agreement made by captain Gore, Mr King sent the Discovery's sheet anchor to the country ship, and, in return, received the guns by which she before rode.

While we remained in the Typa, captain King was shown in the garden of an English gentleman at Macao, the rock, under which, according to the traditional accounts, Camoens, the celebrated Portuguese poet, was accustomed to sit and compose his Lusiad. It is an arch of considerable height, consisting of one solid stone, and forming the entrance of a grotto dug out of the elevated ground behind it. Large spreading trees overshadow the rock, which commands a beautiful and extensive

prospect of the sea, and the islands dispersed about it.

On Tuesday the 11th of January 1780, two sailors belonging to the Resolution went off with a six oared cutter; and though the most diligent search was made, both that and the succeeding day, we never could gain any intelligence of her. It was imagined that these seamen had been seduced by the hopes of acquiring a fortune, if they should return to the fur islands.

As, during our continuance in the Typa, we heard nothing with respect to the measurement of the ships, we may reasonably conclude, that the point so strongly contested, in Commodore Anson's time, by the Chinese, has, in consequence of his courage and firmness, never since been insisted on.

According to the observations that were made while our vessels lay here, the harbour of Macao is situate in the latitude of 22° 12′ north, and the longitude of 113° 47′ east; our anchoring-place in the Typa, in the latitude of 22° 9′ 20″ north, and the longitude of 113° 48′ 34″ east; and the variation of the compass was 19′ west. It was high-water in the Typa, on the full and change days, at a quarter after five o'clock, and, in the harbour of Macao, at fifty minutes past five: the greatest rise was six feet one inch. The flood seemed to come from the southeast; but, on account of the numerous islands lying off the mouth of the river of Canton, we could not properly ascertain that point.

We unmoored on the 12th of January, at twelve o'clock, and scaled the guns, which, on board the

Discovery, amounted at this time to ten; so that her people, by means of four additional ports, could fight seven on a side. In the Resolution, likewise, the number of guns had been augmented from twelve to sixteen; and, in each of our vessels, a strong barricade had been carried round the upper works, and all other precautions taken to give our inconsiderable force a respectable appearance.

We considered it as our duty to furnish ourselves with these means of defence, though there was some reason to believe, that they had, in a great measure, been rendered superfluous by the generosity of our enemies. Captain King had been informed at Canton, that, in the public prints, which had last arrived from Great Britain, mention was made of the instructions having been found on board all the French ships of war that had been taken in Europe, importing, that their commanders, if they should happen to fall in with the ships which had sailed from England under the command of captain Cook, should suffer them to proceed unmolested on their voyage. It was also reported that the American Congress had given similar orders to the vessels employed in their service. This intelligence being further confirmed by the private letters of some of the supercargoes, captain Gore deemed it incumbent on him, in return for the liberal exceptions which our enemies had made in our favour, to refrain from embracing any opportunities of capture which these might afford, and to maintain the strictest neutrality during the whole of his voyage.

Having got under sail, about two o'clock in the afternoon, the Resolution saluted the fort of Macao

with eleven guns; and the salutation was returned with an equal number. The wind failing at five, the ship missed stays, and drove into shallow water; but an anchor being quickly carried out, she was hauled off without sustaining any damage.

The calm continuing, we were under the necessity of warping out into the entrance of the Typa, which we gained by eight in the evening, and remained there till nine o'clock the following morning; when, being assisted by a fresh easterly breeze, we stood to the south between Wungboo and Potoe. At twelve a Swedish vessel saluted us as she passed us on her way to Europe. At four in the afternoon, the Ladrone was about two leagues distant in an eastern direction.

We now steered south half east, having a fresh breeze from the east-northeast point, without any remarkable occurrence, till the 15th at noon; at which time, our latitude being 18° 57′, and our longitude 114° 13′, and the wind shifting to the north, we directed our course rather more to the eastward, with a view of striking soundings over the Macclesfield Bank. This we accomplished on the 16th, at eight o'clock in the evening, and found that the depth of water was fifty fathoms, over a bottom consisting of white sand and shells. We judge this part of the Macclesfield shoals to be in the latitude of 15° 51′, and the longitude of 114° 20′; which computation exactly coincides with the position assigned in Mr Dalrymple's map, whose general accuracy was confirmed, in this instance, by many lunar observations. The variation was found, in the forenoon, to be 39′ west.

We had strong gales from the east by north, on the 17th, with a rough turbulent sea, and gloomy weather. On the succeeding day, the sea continuing to run high, and the wind to blow with violence, we changed our course to southwest by south; and, at twelve o'clock, being in the longitude of 112°, and the latitude of 12° 34′ we began to steer more to the westward for Pulo Sapata, of which we had sight on the 19th, about four in the afternoon. It was, at that time, twelve or fourteen miles distant, bearing northwest by west.

This island, which is denominated *Sapata*, from its resembling a shoe, in figure, is small, elevated, and unfertile. According to our observations, it is situate in the latitude of 10° 4′ north, and the longitude of 109° 10′ east.

The fury of the gale was now so much augmented, and the sea ran so high, that we were obliged to close-reef the top-sails. Our ships, during the three last days, had out-run their reckoning at the rate of twenty miles in a day; and, as this could not be wholly attributed to the effects of a following sea, we partly ascribed it to a current, which, according to captain King's calculations, had set between the noon of the 19th, and the noon of the 20th, forty-two miles to the south-southwestward; and is taken into the account in fixing the position of Sapata.

Having passed this island, we stood to the westward, and, at midnight, sounded, and found a bottom of fine sand at the depth of fifty fathoms. The violence of the wind abating in the morning of the 20th, we let out the reefs, and directed our course to the west by south for Pulo Condore.

Our latitude, at noon, was 8° 46′ north, and our longitude 106° 45′ east; and, between twelve and one, we had a view of that island, in a western direction.

At four o'clock in the afternoon, the extremes of Pulo Condore, and the islands that are situate off it, bore southeast and southwest by west; and our distance from the nearest islands was about two miles. We sailed to the northward of the islands, and stood towards a harbour at the southwest end of Condore, which, having its entrance from the northwest, affords the best shelter during the northeast monsoon. At six o'clock we anchored in six fathoms water, with the best bower; and the Discovery was kept steady with a stream anchor and cable towards the southeast. When moored, the extremities of the entrance of the harbour bore west-northwest a quarter west, and north by west; the opening at the upper end bore southeast by east three quarters east; and we were about two furlongs distant from the nearest part of the shore.

We had no sooner let go our anchors, than captain Gore fired a gun, with a view of giving the inhabitants notice of our arrival, and drawing them towards the shore; but it had no effect. Early the next morning parties were dispatched to cut wood, as captain Gore's principal motive for touching at this island was to supply the ships with that article. During the afternoon, a sudden gust of wind broke the stream cable, by which the Discovery rode, and obliged her people to moor with the bower anchors.

As none of the islanders had yet made their appearance, notwithstanding the firing of a second

gun, captain Gore thought it advisable to go ashore in search of them, that we might lose no time in opening a traffic for such provisions as the place could furnish us with. For this purpose he desired captain King to accompany him in the morning of the 22d; and, as the wind at that time blew violently from the eastward, they did not think it consistent with prudence to coast in their boats to the town, which stands on the eastern side of the island, but rowed round the northern point of the harbour.

They had proceeded along the shore for the space of about two miles, when perceiving a road that led into a wood, they landed. Here captain King left captain Gore, and, attended by a midshipman and four armed sailors, pursued the path which appeared to point directly across the island. They passed through a thick wood, up a hill of considerable steepness, to the distance of a mile, when, after they had descended through a wood of equal extent, on the other side, they arrived in an open, level, sandy country, interspersed with groves of cabbage-palm and cocoa-nut trees, and cultivated spots of tobacco and rice.

Here they descried two huts, situate on the extremity of the wood, to which they directed their march. Before they came up to these habitations, they were observed by two men, who instantaneously ran away from them, notwithstanding all the peaceable and supplicating gestures our party could devise. On reaching the huts Captain King, apprehending that the sight of so many armed men might terrify the natives, commanded his attendants to remain without, while he entered and reconnoitred alone. In one of the huts he found an

elderly man, who was in a great consternation, and was preparing to retire with the most valuable of his effects that he was able to carry. Mr King, however, found means, in a very short time, so entirely to dissipate his terrors, that he came out, and called to the two islanders, who were running away, to return.

Captain King and the old man now quickly came to a perfect understanding. A few signs, particularly that significant one of showing a handful of dollars, and then pointing to a herd of buffaloes, as well as to the fowls that were running in considerable numbers about the huts, left him under no doubts with respect to the real objects of the captain's visit. He immediately pointed to the spot where the town was situate, and made Mr King comprehend that, by repairing thither, all his necessities would be supplied.

By this time the two fugitives had returned, and one of them was ordered by the old man to conduct our party to the town, as soon as an obstacle, of which they were not aware, should be removed. On their first leaving the wood, a herd of buffaloes, consisting of at least twenty, ran towards them, tossing up their heads, snuffing the air, and making a hideous roaring. They had followed our people to the huts, and now remained at a small distance drawn up in a body; and the old man signified to captain King, that it would be extremely dangerous for our party to move till the buffaloes had been driven into the woods; but these animals had become so enraged at the sight of them, that this was not accomplished without some difficulty. The men, indeed, were unable to effect it; but, to the surprise

of captain King and his companions, they called some little boys to their assistance, who speedily drove the animals out of sight. It afterwards appeared that, in driving the buffaloes, and securing them, which is done by putting a rope through a hole made in their nostrils, it was customary to employ little boys, who, at times when the men would not venture to approach them, could stroke and handle them with impunity.

After the buffaloes had been driven off, our party were conducted to the town, which was about a mile distant; the road to it lying through a deep whitish sand. It stands near the sea-side, at the bottom of a retired bay, which affords good shelter during the prevalence of the southwest monsoon.

This town is composed of between twenty and thirty houses, which are built contiguous to each other. Besides these, there are six or seven others dispersed about the beach. The roof, the two ends, and the side that fronts the country, are constructed of reeds in a neat manner. The opposite side, which faces the sea, is perfectly open; but the inhabitants, by means of a kind of screens made of bamboo, can exclude or admit as much of the air and sun as they think proper. There are likewise other large screens or partitions, which serve to divide, as occasion may require, the single room, of which the habitation, properly speaking, consists, into separate apartments.

The islander, who acted as a guide to our party, conducted them to the largest house in the town, belonging to the chief, or (as the natives styled him) the Captain. At each extremity of this house was a room, separated by a partition of reeds from the

middle space, which was uninclosed on either side, and was furnished with partition-screens like the others. There was also a penthouse, which projected to the distance of four or five feet from the roof, and ran the whole length on each side. Some Chinese paintings, representing persons of both sexes in ludicrous attitudes, were hung at each end of the middle room. In this apartment our people were requested to seat themselves on mats, and *betel* was presented to them.

Captain King, by producing money, and pointing at different objects that were in sight, met with no difficulty in making one of the company, who seemed to be the principal person among them, comprehend the chief design of his visit; and as readily understood from him, that the chief or captain was at this time absent, but would quickly return; and that no purchase of any kind could be made without his concurrence and approbation.

Our party took advantage of the opportunity afforded them by this circumstance, to walk about the town; and did not omit searching, though ineffectually, for the remains of a fort, which some of our countrymen had built in the year 1702, near the spot they were now upon *. On their return

* The English settled on this island in 1702, and brought with them a party of Macassar soldiers, who were hired to contribute their assistance in erecting a fort; but the president of the factory not fulfilling his engagement with them, they were determined upon revenge, and one night took an opportunity of murdering all the English in the fort. Those who were without the fort, hearing a noise, were greatly alarmed, and, running to their boats, narrowly escaped with their lives to the Johore dominions, where they met with

to the house of the captain, they were sorry to find that he had not yet arrived, particularly as the time which had been fixed by captain Gore for their return to the boat was nearly expired. The inhabitants desired them to protract their stay, and even proposed their passing the night there, offering to accommodate them in the best manner they were able.

Mr King had observed, when he was in the house before (and now remarked it the more), that the person above mentioned frequently retired into one of the end rooms, where he continued a short time, before he answered the interrogatories that were put to him. This induced Mr King to suspect that the Captain had been there the whole time, though, for reasons with which he himself was best acquainted, he did not think proper to make his appearance. He was confirmed in this opinion, by being stopped as he attempted to enter the room. At length it evidently appeared that Mr King's suspicions were well-founded; for, on his preparing to depart, the person who had passed in and out so many times, came from the room with a paper in his hand, and gave it to him for his perusal; and he was not a little surprised at finding it to be a kind of certificate, written in the French language, of which the following is a translation:—

Peter Joseph George, Bishop of Adran, Apostolic Vicar of Cochin-China, &c. The little Mandarin, who is the bearer hereof, is the real Envoy

very humane treatment. Some of these afterwards repaired to Benjar-Massean, in the island of Borneo, for the purpose of forming a settlement.

of the Court to Pulo Condore, to attend there for the reception of all European vessels whose destination is to approach this place, &c.

A Sai-Gon,
Aug. 10. 1779.

Captain King returned the paper, with many protestations of our people being the Mandarin's good friends, and requested he might be informed that they hoped he would do them the favour to pay them a visit on board the ships, that they might convince him of it. They now took their leave, being, upon the whole, well satisfied with what had happened, but full of conjectures with regard to this extraordinary French paper. Three of the inhabitants proposing to attend them back, they readily accepted the offer, and returned by the way they had come.

Captain Gore was extremely pleased at seeing them again; for, as they had exceeded their appointed time by almost an hour, he began to entertain apprehensions for their safety, and was preparing to march after them. He and his party had, during Mr King's absence, been usefully occupied, in loading the boat with the cabbage-palm, which is very plentiful in this bay. The three guides were each presented with a dollar, as a compensation for their trouble; and a bottle of rum for the Mandarin was entrusted to their care. One of them thought proper to accompany our people on board.

The captains Gore and King rejoined the ships at two o'clock in the afternoon; and several of our shooting parties returned from the woods about the same time, having met with no great success, though

they had seen a considerable variety of birds and other animals, some of which will be noticed hereafter.

Six men, in a proa, rowed up to the ships at five o'clock, from the upper end of the harbour, and one of them, who was a person of a decent appearance, introduced himself to captain Gore with an ease and politeness which indicated that he had been accustomed to pass his time in other company than what Condore afforded. He brought with him the French certificate above transcribed, and gave us to understand that he was the Mandarin mentioned in it. He could speak a few Portuguese words; but, as none of us had learned that language, we were under the necessity of having recourse to a black man on board, who was acquainted with the Malayan tongue, which is the general language of these islanders, and was understood by the Mandarin.

After some previous conversation, he informed us that he professed the Christian faith, and had been baptized by the appellation of Luco; that he had been sent to this island in the preceding August, from Sai-gon, the capital of Cochin-China, and he waited since that time in expectation of some French vessels, which he was to conduct to a safe harbour, on the coast of Cochin-China, not above one day's sale from Condore. We told him that we were not of the French nation, but of the English; and asked him whether he had not heard that those two kingdoms were now at war with each other. He replied in the affirmative; but intimated to us at the same time, that it was a matter of indifference to him to what nation the ships he was directed to wait

for appertained, provided their object was to enter into a traffic with the people of Cochin-China.

He now produced another paper, which he requested us to peruse. This was a letter sealed up, and addressed "To the Captains of any European "ships that may touch at Condore." Though we suppose that this letter was particularly intended for French vessels, yet, as the direction comprehended all European captains, and as Luco was desirous of our reading it, we broke the seal, and perceived that it was written by the same bishop who wrote the certificate.

Its contents were to the following purport:— "That he had reason to expect, by some intelli-"gence lately received from Europe, that a ship "would, in a short time, come to Cochin-China; "in consequence of which news, he had prevailed "on the Court to dispatch a Mandarin (the bearer) "to Pulo Condore, to wait its arrival: that if the "vessel should touch there, the captain might ei-"ther send to him, by the bearer of this letter, an "account of his having arrived, or trust himself "to the direction of the Mandarin, who would pi-"lot the ship into a commodious port in Cochin-"China, not exceeding a day's sail from Pulo Con-"dore: that if he should be inclined to continue "at this island till the return of the messenger, "proper interpreters should be sent back, and any "other assistance, which might be pointed out in "a letter, should be furnished: that there was no "occasion for being more particular, of which the "commander himself must be sensible." This epistle had the same date with the certificate, and

was returned to Luco, without our taking any copy of it.

From the whole of the Mandarin's conversation, as well as from this letter, we had little doubt that the vessel he expected was a French one. We found, at the same time, that he was desirous of not losing his errand, and was not unwilling to become our pilot. We could not discover from him the precise business which the ship he was waiting for designed to prosecute in Cochin-China. The black, indeed, who acted as our interpreter on this occasion, was exceedingly dull and stupid: we should, therefore, be sorry, having such imperfect means of information, to run the hazard of misleading our readers by any of our own conjectures, relative to the object of the Mandarin's visit to Pulo Condore. We shall only add, that he acquainted us that the French vessels might perhaps have touched at Tirnon, and from thence sail to Cochin-China; and, as no intelligence of them had reached him, he imagined that this was most likely to have been the case.

Captain Gore afterwards inquired, what supplies could be procured from this island. Luco replied, that there were two buffaloes belonging to him, which were at our service; and that there were considerable numbers of those animals on the island, which might be purchased for four or five dollars each; but captain Gore thinking that sum very moderate, and appearing inclined to give a much greater for them, the price was speedily augmented to seven or eight dollars.

On the 23d, early in the morning, the launches of both our ships were dispatched to the town, to

bring away the buffaloes which we had given orders for the purchase of; but they were under the necessity of waiting till it was high water, not being able at any other time to make their way through the opening at the head of the harbour. Upon their arrival at the town, the surf broke against the beach with such fury, that it was not without the greatest difficulty that each of the launches brought a buffaloe on board in the evening; and the officers employed in this service declared it as their opinion, that, not only from the violence of the surf, but also from the ferocity of the buffaloes, it would be highly imprudent to attempt to bring off any more this way.

We had procured eight of these animals, and were now at a loss in what manner we should get them on board. We could not conveniently kill more than just served for one day's consumption, as, in the climate in which we now were, meat would not keep till the next day. After consulting with the Mandarin on this point, it was determined that the remainder of the buffaloes should be driven through the wood, and over the hill down to the bay, where our two captains had landed the preceding day; which being sheltered from the wind, was consequently more free from surf.

This plan was accordingly executed; but the untractableness and amazing strength of the animals rendered it a slow and difficult operation. The mode of conducting them was, by putting ropes through their nostrils, and round their horns; but when they were once enraged at the sight of our people, they became so furious, that they sometimes tore asunder the cartilage of the nostril, through which

a border of coral rock, running along each side, and stretching about one hundred yards from the shore.

The anchorage in this harbour is very good, the depth of water being from five to eleven fathoms; but the bottom is so soft and clayey, that we met with considerable difficulty in weighing our anchors. There is shallow water towards the bottom of the harbour, for the extent of about half a mile, beyond which the two islands make so near an approach to each other, that they leave only a passage at high-water for boats. The most commodious watering-place is at a beach on the eastern side, where we found a small stream that supplied us with fourteen or fifteen tons of water in a day.

With regard both to animal and vegetable productions, Pulo Condore is greatly improved since the time when it was visited by Dampier. Neither that navigator, nor the compiler of the East-India Directory, mention any other quadrupeds than hogs, (which are said to be extremely scarce), lizards, and guanoes; and the latter asserts, upon the authority of Monsieur Dedier, a French engineer, who surveyed this island about the year 1720, that none of those fruits and esculent plants, which are so frequently met with in the other parts of India, are to be found here, except *chibbols* (a small sort of onion), water-melons, little black beans, small gourds, and a few potatoes. At present, besides the buffaloes, of which animals we were informed there were several large herds, we purchased from the inhabitants some remarkably fine hogs, of the Chinese breed. They brought us three or four of a wild species; and our sportsmen affirmed, that they perceived their tracks in many parts of the woods,

which likewise abounded with monkies and squirrels; these, however, were so shy, that it was difficult to shoot them.

One species of the squirrel, here observed, was of a beautiful glossy black; and another sort had brown and white stripes. This is denominated the flying squirrel, from its being furnished with a thin membrane, resembling the wing of a bat, which extends on each side of the belly, from the neck to the thighs, and, on the animal's stretching out its legs, spreads, and enables it to fly from one tree to another at a considerable distance. Great numbers of lizards were seen; but we do not know that any of our people saw the guano, or another animal which Dampier * has described, as resembling the guano, though far superior in size.

Among the vegetable improvements of Pulo Condore may be reckoned the fields of rice that were observed; cocoa-nuts, pomegranates, oranges, shaddocks, plantains, and various sorts of pompions, were also found here; though, except the shaddocks and plantains, in no great quantities.

From what we have already mentioned, respecting the Bishop of Adran, it is probable that the island is indebted to the French for these improvements, which were introduced, perhaps, for the purpose of rendering it a more convenient place of refreshment for any of their vessels that may be destined for Cochin-China or Cambodia. Should they have formed, or intend to form, any settlement in those regions, it is undoubtedly well situate for that

* Dampier's Voyage, Vol. I. p. 392.

purpose, as well as for annoying the commerce of their enemies in time of war.

Though the woods are plentifully stocked with the feathered game, our sportsmen had very little success in their pursuit of them. One of our gentlemen was so fortunate as to shoot a wild hen; and all our shooting parties were unanimous in declaring that they heard the crowing of the cocks on every side, which they said resembled that of our common cock, but was more shrill. They observed several of them on the wing, which, however, were extremely shy. The hen that was shot was of a speckled hue, and of the same shape with a full grown pullet of this country, though somewhat inferior in magnitude. Monsieur Sonnerat has, in a long dissertation, endeavoured to prove that he was the first person who ascertained the country to which this useful and beautiful bird belongs, and denies that Dampier met with it at this island.

The land near the harbour is a continued lofty hill, richly adorned, from the summit to the edge of the water, with a great variety of fine high trees. Among others we saw that which is called by Dampier the tar-tree; but perceived none that were tapped in the manner described by him.

The inhabitants of Pulo Condore, who are fugitives from Cochin-China and Cambodia, are not numerous. They are very swarthy in their complection, of a short stature, and of a weak unhealthy aspect; and, as far as we had an opportunity of judging, of a gentle disposition.

We continued at this island till Friday the 28th of January; and, when the Mandarin took his leave of us, captain Gore gave him, at his request, a

letter of recommendation to the commanders of any other vessels that might put in here. He also bestowed on him a handsome present, and gave him a letter for the Bishop of Adran, together with a telescope, which he desired might be presented to him as a compliment for the favours we had received, through his means, at Pulo Condore.

The latitude of the harbour at Condore is 8° 40′ north; its longitude, deduced from many lunar observations, 106° 18′ 46″ east; and the variation of the compass was 14′ west. At the full and change of the moon it was high water at 4h. 15m. apparent time; after which the water continued for twelve hours without any perceptible alteration, viz. till 16h. 15m. apparent time, when the ebb commenced; and at 22h. 15m. apparent time it was low water. The transition from ebbing to flowing was very quick, being in less than five minutes. The water rose and fell seven feet four inches perpendicular.

We weighed anchor on the 28th, and had no sooner cleared the harbour, than we stood to the south-southwest, for Pulo Timoan. On Sunday the 30th, at twelve o'clock, our latitude, by observation, being 5° north, and our longitude 104° 45′ east, we changed our course to south three quarters west, having a gentle northeasterly breeze, attended with fair weather.

The next morning, at two o'clock, our depth of water was forty-five fathoms, over a bottom of fine white sand. The latitude at this time was 4° 4′ north, the longitude 104° 29′ east, and the variation of the compass 31′ east. We had sight of Pulo Timoan at one in the afternoon; and, at three, it was nine or ten miles distant, bearing south-south-

west, three quarters west. This island is high and well furnished with wood, and has several small isles lying off it to the west.

At five o'clock Pulo Puissang was seen, in the direction of south by east, three quarters east; and, at nine, the weather being foggy, and having, from the effect of some current, outrun our reckoning, we were close upon Pulo Aor, in the latitude of 2° 46′ north, and the longitude of 104° 37′ east, before we were perfectly aware of it; in consequence of which we hauled the wind to the east-southeastward. This course we prosecuted till mid-night, and then steered south-southeast, for the Straits of Banca.

At noon, on the 1st day of February, the latitude was 1° 20′ north, and the longitude, deduced from a considerable number of lunar observations, was 105° east. We stood to the south by east; and, towards sunset, the weather being clear and fine, we had a view of Pulo Panjang; the body of the island bearing west-northwest, and the little islands, situate to the southeast of it, west half south, at the distance of seven leagues. Our latitude at the same time was 53′ north.

On Wednesday the 2d, at eight o'clock in the morning, we tried for soundings, continuing the same practice every hour, till we had passed the Straits of Sunda, and struck ground with twenty-three fathoms of line. At twelve, when our latitude, by observation, was 22′ south, our longitude 183° 14′ east, and our depth of water twenty fathoms, we arrived in sight of the small islands known by the name of Dominis, lying off the eastern part

of Lingen, and bearing from north 62° west to north 80° west, at the distance of fifteen or sixteen miles.

At this time we passed a great quantity of wood drifting on the water; and, at one o'clock in the afternoon, Pulo Tya made its appearance, in the direction of southwest by west, seven leagues distant. It is a small elevated island, with two round peaks, and two detached rocks to the northward of it. When we were abreast of this island, our soundings were fifteen fathoms. We observed, during this and the preceding day, considerable quantities of a scum or spawn, of a reddish hue, floating on the sea, in a southern direction.

We had sight of the three islands at day-break on the 3d; and, not long afterwards, saw Monopin Hill, in the island of Banca. At twelve o'clock, this hill, which forms the northeastern point of the entrance of the Straits of Banca, was six leagues distant, bearing southeast half south. Our depth of water at that time was seventeen fathoms; our latitude, by observation, 1° 48′ south; our longitude 105° 3′ east; and there was no perceptible variation in the compass. Having got to the west of the shoal, named Frederic Endric, we entered the straits between two and three, and bore away towards the south; and, in the course of the afternoon, Monopin Hill bearing due east, we ascertained its latitude to be 2° 3′ south, and its longitude 105° 18′ east.

About nine in the evening a boat came off from the Banca shore; but, after the crew had rowed round the ships, they immediately went away. We hailed them in the Malayan tongue, to come on

board, but no answer was returned. At midnight, finding there was a strong tide against us, we let go our anchors in twelve fathoms water, Monopin Hill bearing north 29° west.

In the morning of the 4th, after meeting with some difficulty in weighing our anchors, by reason of the stiff tenacious quality of the ground, we proceeded down the straits with the tide, the inconsiderable wind we had from the north dying away as the day advanced. At twelve o'clock the tide beginning to make against us, and there being a perfect calm, we cast anchor in thirteen fathoms water, at the distance of about one league from what is denominated the Third Point, on the Sumatra shore; Monopin Hill bearing north 54° west, and our latitude being 2° 22′ south, longitude 105° 38′ east.

We weighed at three in the afternoon, and continued our course through the straits with a gentle breeze. At eight o'clock we were abreast of the Second Point, which we passed within two miles, in seventeen fathoms water; a sufficient proof that vessels may border upon this point with safety. About midnight we anchored again, on account of the tide, in thirteen fathoms; Mount Permissang, in the island of Banca, being in the direction of north 7° east, and the First Point bearing south 54° east, at the distance of nine or ten miles.

The next morning we weighed anchor, and stood on to the southeastward; and at ten o'clock we passed a small shoal, situate in a line with the island of Lusepara and the First Point, and about five miles distant from the latter. At twelve, Lusepara bearing south 57½° east, at the distance of four

miles, its latitude was determined by us to be 3° 13½′ south, and its longitude 106° 15′ east. The difference of longitude between the island of Lusepara, which stands in the southern entrance of the Straits of Banca and Monopin Hill, which forms one side of the northern entrance, we found to be 55′.

In passing these straits, ships may make a nearer approach to the coast of Sumatra than to that of Banca. There are ten, eleven, twelve, or thirteen fathoms, free from shoals and rocks, at the distance of two or three miles from the coast: the lead, however, is the most certain guide. The country, even to the edge of the water, is covered with wood; and the shores are so low, that the land is overflowed by the sea, which washes the trunks of the trees. To this flat and marshy situation of the Sumatra shore may be ascribed those thick fogs and vapours which were every morning perceived by us, not without some degree of dread and horror, to hang over the island, till they were dissipated by the solar rays. The shores of Banca are much bolder, and the inland country rises to a moderate elevation, and seems to abound with wood. We frequently observed fires on this island during the night; but none on the opposite coast. The tide runs at the rate of between two and three miles an hour through the straits.

On Sunday the 6th, in the morning, we passed to the west of Lusepara, at the distance of four or five miles; our soundings, in general, being five or six fathoms, and never less than four. We afterwards stood to the south by east; and having increased our depth of water to seven fathoms, and

brought Lusepara to bear due north, we changed our course to south by west, frequently making use of the lead, and hauling out a little whenever we happened to shoal our water. We still found the soundings on the side of Sumatra to be regular, and shoaling gradually as we came nearer the shore.

At five o'clock in the afternoon we descried the Sisters, in the direction of south by west half west; and, at seven, we cast anchor in ten fathoms water, near three leagues to the northward of those islands. The weather was close and sultry, with light winds blowing, for the most part, from the northwest, but occasionally shifting round to the northeast; and, in the course of the night, much lightning was observed over Sumatra.

The following morning, at five, we weighed and made sail; and in three hours afterwards we were close in with the Sisters. These are two islands of very small extent, plentifully stocked with wood, situate in the latitude of 5° south, and the longitude of 106° 12′ east, nearly south and north from each other, and encompassed by a reef of coral rocks; the whole circuit of which is four or five miles. At twelve o'clock we had sight of the island of Java; the northwestern extreme of which (Cape St Nicolas) bore south; North Island, near the shore of Sumatra, south 27° west; and the Sisters north 27° east, at the distance of twelve or thirteen miles. Our latitude, at the same time, was 5° 21′ south, and our longitude 105° 57′ east.

About four in the afternoon we perceived two vessels in the Straits of Sunda; one of which lay at anchor near the Mid-channel Island, the other nearer the shore of Java; and, as we did not know

to what nation they might belong, we thought proper to prepare our ships for action. At six o'clock we dropped our anchors in twenty-five fathoms water, about four miles east by south from North Island. Here we remained the whole night, during which we had very heavy thunder and lightning to the northwest; the wind blowing in light breezes from the same quarter, attended with violent rain.

On the 8th, about eight o'clock in the morning, we weighed, and proceeded through the Straits of Sunda, the tide settling towards the south, as it had done all the preceding night. At ten, the wind failing, we anchored again in thirty-five fathoms; an elevated island, or rather rock, named the Grand Toque, bearing south by east. Being, at that time, not above two miles from the ships before mentioned, which now hoisted Dutch colours, captain Gore sent a boat on board to procure intelligence. The rain still continued, accompanied with thunder and lightning.

The boat returned easily in the afternoon, with information, that the larger of the two vessels was a Dutch East-Indiaman, bound for Europe; and the other, a packet from Batavia, with instructions for the several ships lying in the Straits. It is customary for the Dutch ships, when their cargoes are almost completed, to quit Batavia, on account of its very unwholesome climate, and repair to some of the more healthy islands in the Straits, where they wait for their dispatches, and the remainder of their lading. The Indiaman, notwithstanding this precaution, had lost four men since she had left Batavia, and had as many more whose lives were despaired of. She had remained here a fortnight, and was

now on the point of proceeding to Cracatoa to take in water, having just received final orders by the packet.

At seven o'clock the next morning we weighed anchor, and steered to the southwestward through the Straits, taking care to keep close in with the islands on the Sumatra shore, for the purpose of avoiding a rock near Mid-channel Island, which was situate on our left.

Between ten and eleven, captain King was ordered by captain Gore to make sail towards a Dutch vessel that now came in sight to the southward, and which we imagined was from Europe; and, according to the nature of the information that might be obtained from her, either join him at Cracatoa, where he designed to stop, in order to furnish the ships with arrack; or to proceed to the southeastern extremity of Prince's Island, and there provide a supply of water, and wait for him. In compliance with these instructions, captain King bore down towards the Dutch ship, which, in a short time after, cast anchor to the eastward; when the current setting with great force in the Straits to the southwest, and the wind slackening, Mr King was unable to fetch her: having therefore got as near her as the tide would allow, he also anchored. He immediately sent Mr Williamson, in the cutter, with orders to get on board the Dutch vessel, if possible; but, as she lay at the distance of almost a mile, and the tide ran with great rapidity, the boat dropped fast astern; in consequence of which, captain King having made the signal to return, began, without delay, to veer away the cable, and sent out a buoy astern, to assist the boat's crew in getting on board again.

Our poverty, with respect to cordage, was, on this occasion, very conspicuous; for there was not, in the Discovery's store-room, a single coil of rope to fix to the buoy; so that her people were under the necessity of veering away two cables, and the greater part of their running rigging, before the boat, which was driving very rapidly to the southward, could fetch the buoy.

Captain King was now obliged to wait till the force of the tide should abate; and this did not happen till the following morning, when Mr Williamson went on board the Dutch ship, and was informed, that she had been seven months from Europe, and three from the Cape of Good Hope; that, before her departure, the kings of France and Spain had declared war against his Britannic Majesty; and that she had left Sir Edward Hughes at the Cape with a squadron of men of war, and also a fleet of East-India ships. Mr Williamson being, at the same time, assured, that the water of Cracatoa was extremely good, and that the Dutch always preferred it to that of Prince's Island, captain King determined to rejoin the Resolution at the former place. He therefore, taking the advantage of a fair breeze, weighed, and made sail towards the island of Cracatoa, where he soon after perceived her at anchor; but the tide setting forcibly against him, and the wind failing, he again thought proper to cast anchor at the distance of near two leagues from the Resolution, and immediately dispatched a boat on board, to communicate to captain Gore the intelligence procured by Mr Williamson.

When the Resolution saw her consort preparing to come, she fired her guns, and displayed the signal

for leading a-head, by hoisting an English jack at the ensign staff. This was intended to prevent the Discovery's anchoring, on account of the foul ground, which the maps on board the Resolution placed in this situation. However, as captain King met with none, but, on the contrary, found a muddy bottom, and good anchoring-ground at the depth of sixty fathoms, he remained fast till the return of the boat, which brought him orders to proceed to Prince's Island the ensuing morning. He was at this time about two miles distant from the shore; the Peak of Cracatoa bearing northwest by north, Prince's Island southwest by west, and Bantam Point east-northeast half east.

Cracatoa is the southermost of a cluster of islands lying in the entrance of the Straits of Sunda. It has a lofty peaked hill at its southern extremity*, which is situate in the latitude of 6° 9′ south, and the longitude of 105° 15′ east. The whole circumference of the island does not exceed nine miles. Off its northeastern extreme is a small island, forming the road where the Resolution anchored; and within a reef running off the southern end of the latter there is tolerable shelter against all northerly winds, with twenty-seven fathoms water in the mid-channel, and eighteen near the reef. Towards the northwest there is a narrow passage between the two islands for boats.

The shore that constitutes the west side of the

* The island of Sambouricou, or Tamarin, which stands twelve or thirteen miles to the northward of Cracatoa, may easily be mistaken for the latter, since it has a hill of nearly the same figure and dimensions, situate likewise near its south end.

road runs in a northwesterly direction, and has a bank of coral extending into the sea about a third of the length of a cable, which renders landing difficult for boats, except at the time of high-water; but the anchoring-ground is very good, and clear of rocks. The place where the Resolution procured a supply of water is a small spring abreast of the southern extreme of the small island, at no great distance from the sea-side. To the southward there is a spring, whose water is extremely hot, and is used by the inhabitants as a bath. Whilst we lay off the south end of this island, the master was sent ashore, in a boat, to search for water; but, after he had landed with some difficulty, he returned without success.

Cracatoa consists of elevated land, gradually rising on all sides from the sea; and is entirely covered with trees, except a few spots which have been cleared by the natives for the purpose of forming rice fields. The population of the island is very inconsiderable. Its chief is dependent on the King of Bantam, to whom the chiefs of all the other islands in the Straits are also subject. The coral reefs afford small turtles in abundance; but other refreshments are exceedingly scarce, and are sold at a very exorbitant price. This island is considered as very healthy, in comparison of the neighbouring countries.

The latitude of the road where the Resolution cast anchor is 8° 6′ south; its longitude, by observation, 105° 36′ east, and, by Mr Bailey's time-keeper, 105° 48′ east. The variation of the compass was 1° west. It is high-water, on the full and change days, at seven o'clock in the morning;

and the water rises three feet two inches perpendicular.

About eight in the evening the wind began to blow fresh from the west, accompanied with violent thunder, lightning, and rain. The next morning (the 11th) at three o'clock, captain King weighed anchor, and steered for Prince's Island; but the westerly wind dying away, a breeze from the southeast succeeded, and the tide, at the same time, setting with great force to the southwestward, he was prevented from fetching the island, and obliged, at two in the afternoon, to anchor at the distance of nine or ten miles from it, in sixty-five fathoms water, over a muddy bottom; the elevated hill bearing southwest by south, and the peak of Cracatoa north by east.

Light airs and calms prevailed till six o'clock the following morning, at which time the Discovery weighed and made sail, though, in heaving the anchor out of the ground, the old messenger was twice broken, and also a new one. This, however, was entirely owing to the miserable state of the cordage, since the strain was not very considerable.

The wind being fair, she came to an anchor, at twelve o'clock, off the southeastern extremity of Prince's Island, in twenty-six fathoms water, over a bottom of sand, at the distance of half a mile from the nearest part of the shore; the east end of the island bearing north-northeast, the high peak northwest half-west, and the most southerly point in view southwest by south.

The Discovery had no sooner anchored, than Lieutenant Lannyon, who had been at this island in the year 1770, with captain Cook, was dispatch-

ed, in company with the master, to search for the watering-place. The brook from which the Endeavour, according to the best of Mr Lannyon's recollection, had been furnished, was now found extremely salt. They observed further inland a dry bed where the water had probably lodged in rainy seasons; and another run, about a cable's length below, supplied from a spacious pool, whose bottom, as well as surface, was covered with dead leaves. This, though somewhat brackish, being far superior to the other, the Discovery's people began watering here early in the morning of the 13th, and finished that service the same day.

The inhabitants, who came to them soon after they had anchored, brought a considerable quantity of fowls, and some turtles; the last, however, were in general very small. During the night it rained with great violence; and on Monday the 14th, at day-break, the Resolution was seen to the north steering towards the island, and about two o'clock in the afternoon she cast anchor close to the Discovery.

As captain Gore had not completed his stock of water at Cracatoa, he sent his men ashore on the 15th, who repaired to the brook that was first mentioned, which was now become perfectly sweet in consequence of the rain, and flowed in great abundance. This being a treasure too valuable to be disregarded, captain King gave orders, that all the casks which the seamen of his ship had before filled should be started, and replenished with the fresh water. This was accordingly performed by twelve o'clock the next day; and in the evening the decks were cleared, and both vessels prepared for sea.

We had heavey rains, and variable winds, in the morning of the 18th, which prevented us from getting under way till two o'clock in the afternoon, when a light northerly wind arose; but this being of short duration, we were under the necessity of anchoring again, at eight in the evening, in fifty fathoms water. The following morning, at the same hour, being favoured by a northwesterly breeze, we broke ground, to our extreme satisfaction, for the last time in the Straits of Sunda; and on the 20th, we had totally lost sight of Prince's Island.

As this island has been described by captain Cook in the narrative of a former voyage, we shall only add, that we were uncommonly struck with the great general resemblance of the natives in point of complexion, figure, manners, and even language, to the inhabitants of the various islands visited by us in the Pacific Ocean.

The country is so plentifully furnished with wood, that, notwithstanding the quantities annually cut down by the crews of the vessels which touch at this island, there is no appearance of its diminution. We were well supplied with fowls of a moderate size, and small turtles; the former of which we purchased at the rate of a Spanish dollar for ten. The natives likewise brought us many hog-deer, and an amazing number of monkies, to our great annoyance, as the greater part of our sailors found means to procure one, if not two, of these troublesome and mischievous animals.

If Mr Lannyon had not been with us we should probably have met with some difficulty in finding the watering-place: it may, therefore, not be improper to give a particular description of its situa-

tion, for the benefit of subsequent navigators. The peaked hill on the island bears northwest by north from it ; a remarkable tree, which grows on a coral reef, and is entirely detached from the adjacent shrubs, stands just to the north of it ; and a small plot of reedy grass, the only piece of the kind that appears hereabouts, may be seen close by it. These marks will indicate the place where the pool discharges itself into the sea ; but the water here, as well as that which is in the pool, being in general salt, the casks must be filled about fifty yards higher up ; where, in dry seasons, the fresh water which descends from the hills is in a great measure lost among the leaves, and must therefore be searched for by clearing them away.

The latitude of the anchoring-place at Prince's Island is 6° 36′ 15″ south, and its longitude 105° 17′ 30″ east. The variation of the compass was 54′ west ; and the mean of the thermometer 83°.

We had begun to experience, from the time of our entering the Straits of Banca, the pernicious effects of this noxious climate. Two of the Discovery's people became dangerously ill of malignant putrid fevers ; which, however, were prevented from being communicated to others, by putting the patients apart from the rest of the crew, in the most airy births. Many of us were attacked with disagreeable coughs ; several complained of violent pains in the head ; and even the most healthy persons among us felt a sensation of suffocating heat, accompanied with an extreme languor, and a total loss of appetite.

Though our situation, however, was for a time thus uneasy, and even alarming, we had, at last, the

inexpressible satisfaction of escaping from these destructive seas without the loss of a single life. This circumstance, in all probability, was partly owing to the vigorous health of the ships' companies, on our first arrival in these parts, as well as to the unremitting attention, that was now become habitual in our men, to the prudent and salutary regulations introduced among us by captain Cook.

At the time of our departure from Prince's Island, and during our whole passage from thence to the Cape of Good Hope, the people of the Resolution were in a far more sickly condition than those of the Discovery. For though many of the crew of the latter ship continued, for some time, to complain of the effects of the pestilential climate they had left, they all happily recovered. Of the two who had been afflicted with fevers, one, after having been seized, on the 12th of February, with violent convulsions, which reduced him to the verge of dissolution, obtained such relief from the application of blisters, that he was out of danger in a short time afterwards: the other recovered, but by more slow degrees. On board the Resolution, besides the fevers and coughs under which the greater part of the crew laboured, many were attacked with fluxes, the number of whom, contrary to our expectations, continued to augment till our arrival at the Cape of Good Hope.

This difference was partly ascribed by captain Gore, and probably not without good reason, to the Discovery's fire-place being between decks; the heat and smoke of which, he was of opinion, contributed to mitigate the noxious effects of the damp nocturnal air. But captain King was rather

inclined to imagine, that his people escaped the flux by the precautions which were taken to prevent their receiving it from others. For, if some kinds of fluxes be, as he apprehended they were, contagious, he thought it not improbable that the crew of the Resolution caught this disorder from the Dutch vessels at Cracatoa. For the purpose of avoiding this danger, Mr Williamson, when he was dispatched to the East-Indiaman in the entrance of the Straits of Sunda, was strictly commanded to suffer none of his people, on any account whatever, to go on board: and afterwards, whenever the Discovery had occasion to have any communication with her consort, the same caution was continually observed.

As soon as we were clear of Prince's Island, we had a light breeze from the west-northwest point. This, however, was not of long duration; for, on the 20th, the wind again became variable, and remained so till the 25th at noon, when it blew fresh from the northward, with squalls.

On Tuesday the 22d, about twelve o'clock, when our latitude was 10° 28′ south, and our longitude 104° 14′ east, we perceived great numbers of boobies, and other birds that seldom fly to any great distance from land. Hence we conjectured, that we were not far from some small unknown island.

The wind, in the evening of the 25th, shifted suddenly to the south, attended with heavy rains, and blew with very considerable violence. During the night almost all the sails we had bent gave way, and most of them were split to rags; the rigging likewise sustained material injury; and, the following day, we were under the necessity of bending our last suit of sails, and of knotting and splicing the

rigging, as the whole of our cordage was expended. We ascribed this sudden tempest to the change from the monsoon to the regular trade wind. We had made, according to our reckoning, about 4½° of longitude west from Java Head, and our latitude was about 13° 10′ south.

From the 26th of February to the 28th of the succeeding month, we had a regular trade wind from the southeast to east by south, accompanied with fine weather; and, as we sailed in an old beaten track, no incident worthy of notice occurred. On the 28th of March, in the forenoon, our latitude being 31° 42′ south, and our longitude 35° 26′ east, the trade wind quitted us in a violent thunder storm. From this time to the 3d day of April, when we were in the latitude of 35° 1′ south, and the longitude of 26° 3′ east, we had moderate winds, blowing principally from the south. A fresh easterly breeze then arose, which continued till the afternoon of the 4th; and, for the two following days, a calm prevailed.

Captain Gore had hitherto designed to proceed directly to the island of St Helena, without stopping at the Cape of Good Hope; but as the Resolution's rudder had been, for some time, decaying, and, on examination, was found to be in a dangerous state, he formed the resolution of repairing immediately to the Cape, as being the most eligible place, both for providing a new main-piece to the rudder, and for the recovery of his sick.

From the 21st day of March, when our latitude was 27° 22′ south, and our longitude 52° 25′ east, to the 5th of April, when we were in the latitude of 36° 12′ south, and the longitude of 22° 7′ east,

we strongly felt the influence of the currents, which set towards the south-southwest, and southwest by west, sometimes at the rate of eighty miles in a day. But, on the 6th of April, we totally lost them, having got under the lee of the coast of Africa.

In the forenoon of the 6th a vessel appeared to the southwest, standing towards us; and the wind, not long after, beginning to blow from the same quarter, we prepared our ships for action. We now perceived, from the masthead, five more sail on our lee-bow, steering an easterly course; but the weather becoming hazy, we lost sight of them all in the space of an hour. At twelve o'clock the latitude was 35° 49′ south, and the longitude 21° 32′ east.

The following morning, at seven o'clock, we descried the land to the north at a considerrble distance. On the 8th, the wind blew fresh from the northwest, with squalls. The next day it settled in the western point, and we made a pretty near approach to the vessel seen on the 6th, but did not hail her. Though she was clumsy in figure, and, to all appearance, was unskilfully managed, she greatly out-sailed us. The colours which she hoisted differed from any we had seen, and were supposed by some of us to be Imperial; but others imagined they were Portuguese.

On Monday the 10th, at break of day, the land again made its appearance to the north-northwestward; and, in the course of the morning, a snow was seen bearing down to us. She proved to be an English East-India packet, which had quitted Table Bay three days before, and was now cruising with instructions for the Chinafleet, and other India ships. She informed us, that Monsieur Trongoller's

squadron, consisting of half a dozen sail, had left the Cape about three weeks before, and was gone to cruise off St Helena, in search of our East-India fleet. From this intelligence we conjectured, that the five vessels we had seen steering to the eastward, probably belonged to the French squadron, which, in that case, had relinquished their cruise, and were perhaps, proceeding to the island of Mauritius. Having communicated our conjectures to the packet, and likewise mentioned the time we understood the China fleet was to sail from Canton, we left her, and continued our progress towards the Cape. In the evening, False Cape bore east-northeast, and the Gunner's Quoin north by east; but we were prevented by the wind from getting into False Bay till the evening of the 12th, when we let go our anchors abreast of Simon's Bay. We observed a strong current setting to the west, round the Cape, which, for some time, we were barely able to stem, with a breeze that would have carried us four miles an hour.

We weighed the next morning, and stood into Simon's Bay. At eight o'clock, we came to anchor, at the distance of one third of a mile from the nearest shore; the southeast point of the bay bearing south by east, and Table Mountain north-east half north. We found the Nassau and Southampton East-Indiaman lying here, in expectation of a convoy for Europe. The Resolution saluted the fort with eleven guns, and was complimented with an equal number in return.

As soon as we had cast anchor, Mr Brandt, the governor of this place, favoured us with a visit. This gentleman had the highest regard and esteem

for captan Cook, who had been his constant guest whenever he had touched at the Cape; and though he had, some time before, received intelligence of his unfortunate catastrophe, he was extremely affected at the sight of our vessels returning without their old commander. He was greatly surprised at seeing most of our people in so robust and healthy a state, as the Dutch ship which had quitted Macao at the time of our arrival there, and had afterwards stopped at the Cape, reported, that we were in a most wretched condition, there being only fourteen persons left on board the Resolution, and seven in the Discovery. It is difficult to conceive what motive could have induced these people to propagate so wanton and infamous a falsehood.

Captain King, on Saturday the 15th, accompanied captain Gore to Cape-Town; and, the following morning, they waited on Baron Plettenberg, the Governor, who received them with every possible demonstration of civility and politeness. He entertained a great personal affection for captain Cook, and professed the highest admiration of his character; and, on hearing the recital of his misfortune, broke forth into many expressions of unaffected sorrow. In one of the principal apartments of the Baron's house, he showed our gentlemen two pictures, one of De Ruyter, the other of Van Trump, with a vacant space left between them, which, he said, he intended to fill up with the portrait of captain Cook; and, for this purpose, he requested that they would endeavour to procure one for him, at any price, on their arrival in Great Britain.

The Governor afterwards informed them, that all

the nations then at war with England had issued orders to their respective cruisers to suffer us to pass without molestation. With regard to the French, there was sufficient reason to consider this as true; for Mr Brandt had already delivered to captain Gore a letter from Mr Stephens, Secretary of the Admiralty, enclosing a transcript of Monsieur de Sartine's orders, taken on board the Licorne. The affair, however, with respect to the Americans, still rested on report: but, as to the Spaniards, Baron Plettenberg assured our gentlemen, that he had been expressly told by the captain of a Spanish vessel which had stopped at the Cape, that he, and all the officers of his nation, had received injunctions of the same nature.

By these assurances, captain Gore was confirmed in his resolution of maintaining, on his part, a neutral conduct; in consequence of which, when, upon the arrival of the Sibyl, to convoy the East-Indiaman home, it was proposed to him to attend them on their voyage, he thought proper to decline an offer, the acceptance of which might perhaps have brought him into a very embarrassing dilemma, in case of our falling in with any of the ships belonging to our enemies.

During our continuance at the Cape we met with the most friendly treatment, not only from the Governor, but also from the other principal persons of the place, as well Africans as Europeans. On our first arrival, Colonel Gordon, the commander of the Dutch troops, was absent on a journey into the inland parts of Africa, but returned before we left the Cape. Upon this occasion he had penetrated further into the interior parts of the country than any

preceding traveller, and made considerable additions to the excellent collection of natural curiosities with which he has contributed to enrich the Museum of the Prince of Orange. Indeed his long residence at the Cape, and the great assistance he has derived from his rank and station there, joined to an ardent desire of knowledge, and an active, indefatigable spirit, have enabled him to gain a more perfect knowledge of this part of Africa than any other person has had an opportunity of acquiring; and it is with pleasure we congratulate the public on his intentions of publishing a narrative of his travels.

False Bay lies to the eastward of the Cape of Good Hope, and is frequented by vessels during the prevalence of the nortwesterly winds, which begin to exert their influence in May, and render it dangerous to remain in Table Bay. It is terminated to the eastward by False Cape, and to the westward by the Cape of Good Hope. It is eighteen miles wide at its entrance, and the two Capes bear due east and west from each other.

At the distance of eleven or twelve miles from the Cape of Good Hope, on the western side, is situate Simon's Bay, the only commodious station for shipping to be in; for, though the road without it affords tolerable anchorage, it is rather too open, and not well adapted for procuring necessaries, the town being small, and supplied with provisions from Cape Town, which stands at the distance of about twenty four miles. To the north-northeastward of Simon's Bay, there are some others, from which, however, it may with ease be distinguished, by a re-

markable sandy way to the north of the town, which forms a conspicuous object.

In steering for the harbour, along the western shore, there is a small flat rock, known by the name of Noah's Ark; and about a mile to the north-eastward of it there are several others, which are denominated the Roman Rocks. These are a mile and a half distant from the anchoring-place; and either to the northward of them, or between them, there is a safe passage into the Bay.

When the north-westerly gales are set in, the navigator, by the following bearings, will be directed to a secure and convenient station; Noah's Ark, south 51° east, and the centre of the hospital south 53° west, in seven fathoms water. But, if the south-easterly winds should not have ceased blowing, it is more advisable to remain further out in eight or nine fathoms. The bottom consists of sand, and the anchors, before they get hold, settle considerably. The land, on the northern side of the bay, is low and sandy; but the eastern side is very elevated. About two leagues to the eastward of Noah's Ark stands Seal Island, whose southern part is said to be dangerous, and not to be approached, with safety, nearer than in twenty-two fathoms water. There are many sunken rocks off the Cape of Good Hope, some of which make their appearance at low-water; and others constantly have breakers on them.

The anchoring-place in Simon's Bay is situate in the latitude of 34° 20′ south, by observation; and its longitude is 18° 29′ east. It was high-water, on the full and change days, at 5h. 55m. apparent time. The tide rose and fell five feet five inches;

and, at the neap tides, the water rose only four feet one inch.

According to the observations made by captain King and Mr Bailey, on the 11th of April, when the Cape of Good Hope bore due west, its latitude is 34° 28′ south, which is 4′ to the northward of the Abbe de la Caille's position of it.

Having provided the necessary quantity of naval stores, and completed our victualling, we quitted Simon's Bay on Tuesday the 9th of May. On the 14th of the same month we got into the southeast trade wind, and stood to the west of the islands of Ascension and St Helena. On Wednesday the 31st, we were in the latitude of 12° 48′ south, and the longitude of 15° 40′ west. On the 12th of June we passed the equinoctial line for the fourth time during our voyage, in the longitude of 26° 16′ west.

We now perceived the effects of a current setting north by east, at the rate of half a mile in an hour. After continuing in the same direction till the middle of July, it began to set a little to the southward of the west. On Saturday, the 12th of August, we descried the western coast of Ireland, and endeavoured to get into Port Galway, from whence captain Gore intended to have dispatched the journals and charts of our voyage to London. This attempt, however, proved ineffectual; and we were compelled, by violent southerly winds, to stand to the north.

Our next design was to put into Lough Swilly, but the wind continuing in the same quarter, we steered to the northward of the island of Lewis; and on Tuesday, the 22d of August, about eleven

o'clock in the forenoon, both our vessels anchored at Stromness. From this place captain King was sent by captain Gore to inform the Lords of the Admiralty of our arrival; and, on Wednesday the 4th of October, the ships reached the Nore in safety, after an absence of four years, two months, and two and twenty days.

When captain King quitted the Discovery at Stromness, he had the satisfaction of leaving the whole ship's company in perfect health; and, at the same time, the number of sick persons on board the Resolution did not exceed two or three, only one of whom was incapable of service. In the whole course of the voyage the Resolution lost no more than five men by sickness, three of whom, at the time of our departure from Great Britain, were in a precarious state of health: the Discovery did not lose one individual. A strict attention to the excellent regulations established by captain Cook, with which our readers are, doubtless, already acquainted, may justly be deemed the chief cause, under the blessing of Divine Providence, of this extraordinary success. But, notwithstanding these salutary precautions, we might, perhaps, in the end, have felt the pernicious effects of salt provisions, had we not availed ourselves of every substitute which our situation, at different times, afforded us. As these were sometimes extremely nauseous, frequently consisting of articles which our people had not been accustomed to consider as food for men, it became necessary, for the purpose of removing their prejudices, and conquering their disgusts, to employ the united aid of persuasion, example, and authority.

Portable soup and sour krout were the preventives we principally depended on. We had no opportunity of trying the effects of the antiscorbutic remedies, with which we were plentifully furnished, as there did not appear, during our whole voyage, the slightest symptoms of the scurvy among the crew of either ship.

Our malt and hops had likewise been kept as a resource in case of sickness; but, on being examined at the Cape of Good Hope, they were found totally spoiled. About the same time we opened some casks of oatmeal, pease, groats, flour, biscuit, and malt, which, for the sake of experiment, we had put up in small casks, lined with tin-frail; and all the articles, except the pease, were found in a much better condition than could have been expected in the ordinary mode of package.

On this occasion, we cannot omit recommending to the consideration of government, the necessity of furnishing such of his Majesty's ships as may be exposed to the influence of unhealthy climates, with a sufficient quantity of Peruvian bark. It fortunately happened in the Discovery, that only one of the men who were attacked with fevers in the Straits of Sunda stood in need of this valuable medicine; for the whole quantity that surgeons are accustomed to carry out in such vessels as ours was consumed by him alone. If more persons had been affected in the same manner, it is probable that they would all have perished for want of the only remedy that could effectually have relieved them.

We shall conclude our narrative of this voyage with the mention of a circumstance, which, if we

consider its long duration, and the nature of
service in which we were employed, seems scarc
less remarkable than the uncommon healthi
of the ships' companies. This was, that our v
sels never lost sight of each other for a whole d
except on two occasions; the first of which
the consequence of an accident that befel the D
covery off the coast of Owhyhee; and the sec
was owing to the fogs we met with at the entra
of the bay of Awatska. As this share of m
belongs almost entirely to the inferior offices
furnishes a striking proof of their skill and vi
lance.

FINIS.